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ABSTRACT

The National Association for Girls and Women in Sport (NAGWS) publishes ten biennial and two annual guides for 22 sports. Guides contain information on NAGWS or NAGWS-approved playing rules, officials' ratings in most sports, articles on coaching techniques and organization, regulations governing AIAW National Championships in applicable sports, bibliographies, and special features. A section of each guide presents information about NAGWS and the services it offers teachers, coaches, administrators, and players. This NAGWS guide for tennis, badminton, and squash is one of the biennial publications and follows the organization described above. It contains articles on the various aspects of tennis, nine articles on aspects of badminton, and four articles about squash. Special features include study questions for the Ratings Examinations and officiating techniques in tennis and badminton. (DMT)

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NAGWS guide

National Association for Girls & Women in Sport •

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Tennis
Badminton
Squash

JUNE 1976 — JUNE 1978

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SPORT 345

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See inside back cover for a listing of additional NAGWS/AAHPER publications.

NAGWS guide

Tennis
Badminton
Squash

JUNE 1976 – JUNE 1978

With Official Rules

Helen Knierim, Coordinator
NAGWS Sports Guides Committee
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NATIONAL ASSOCIATION FOR GIRLS
& WOMEN IN SPORT
American Alliance for Health,
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NATIONAL ASSOCIATION FOR GIRLS AND WOMEN IN SPORT

The National Association for Girls and Women in Sport is a nonprofit, educational organization designed to serve the needs of participants, teachers, coaches, leaders and administrators in sports programs for girls and women. It is one of seven associations of the American Alliance for Health, Physical Education, and Recreation.

PURPOSE

The purpose of the National Association for Girls and Women in Sport is to foster the development of sports programs for the enrichment of the life of the participant.

BELIEFS

The National Association for Girls and Women in Sport believes that:

Sports are an integral part of the culture in which we live.

Sports programs are a part of the total educational experience of the participant when conducted in educational institutions.

Opportunities for instruction and participation in sports appropriate to her skill level should be included in the experience of every girl.

Sports skills and sports participation are valuable social and recreational tools which may be used to enrich the lives of women in our society.

Competition and cooperation may be demonstrated in all sports programs, although the type and intensity of the competition and cooperation will vary with the degree or level of skill of the participants.

An understanding of the relationship between competition and cooperation and the utilization of both within the accepted framework of our society is one of the desirable outcomes of sports participation.

Physical activity is important in the maintenance of the general health of the participant.

Participation in sports contributes to the development of self-confidence and to the establishment of desirable interpersonal relationships.

FUNCTIONS

The National Association for Girls and Women in Sport promotes desirable sports programs through:

1. Formulating and publicizing guiding principles and standards for the administrator, leader, official, and player.
2. Publishing and interpreting rules governing sports for girls and women.
3. Providing the means for training, evaluating, and rating officials.
4. Disseminating information on the conduct of girls and women's sports.
5. Stimulating, evaluating, and disseminating research in the field of girls and women's sports.
6. Cooperating with allied groups interested in girls and women's sports in order to formulate policies and rules that affect the conduct of women's sports.
7. Providing opportunities for the development of leadership among girls and women for the conduct of their sports programs.

STANDARDS IN SPORTS FOR GIRLS AND WOMEN

Standards in sports activities for girls and women should be based upon the following:

1. Sports activities for girls and women should be taught, coached, and officiated by qualified women whenever and wherever possible.
2. Programs should provide every girl with a wide variety of activities.
3. The results of competition should be judged in terms of *benefits to the participants* rather than by the winning of championships or the athletic or commercial advantage to schools or organizations.

Health and Safety Standards for Players

Careful supervision of the health of all players must be provided by –

1. An examination by a qualified physician
2. Written permission by a qualified physician after serious illness or injury
3. Removal of players when they are injured or overfatigued or show signs of emotional instability
4. A healthful, safe, and sanitary environment for sports activity
5. Limitation of competition to a geographical area which will permit players to return at reasonable hours; provision of safe transportation.

General Policies

1. Select the members of all teams so that they play against those of approximately the same ability and maturity.
2. Arrange the schedule of games and practices so as not to place demands on the team or player which would jeopardize the educational objectives of the comprehensive sports program.
3. Discourage any girl from practicing with, or playing with, a team for more than one group while competing in that sport during the same sport season.
4. Promote social events in connection with all forms of competition.

SOURCES OF INFORMATION AND SERVICE

All requests for information about services should be addressed to: Executive Secretary, National Association for Girls and Women in Sport (NAGWS), AAHPER, 1201 - 16th Street, N.W., Washington, D.C. 20036.

NATIONAL COACHES COUNCIL

The National Coaches Council was formed by the NAGWS to:

(1) provide a channel of direct communication among coaches at all educational levels
(2) assist in the formulation and dissemination of guiding principles, standards and policies for conducting competitive sports programs for girls and women
(3) keep members informed of current coaching techniques and trends
(4) sponsor clinics and conferences in sports and coaching skills
(5) provide input from coaches to USCSC sports committees and representative assembly
(6) promote cooperative efforts with other sports-centered organizations
(7) provide a united body for positive political action in the realm of girls' and women's athletics.

Academies for 11 sports have been established. (Note the application blank for specific listings.) Membership in each Academy is open to any coach of girls or women's sports or any interested person. Annual dues for AAHPER members are $10.00 per Academy. Non-AAHPER members pay $20.00 annually for membership in one sport Academy and $10.00 for each additional Academy membership desired. The $10.00 non-membership fee may be applied at any time toward AAHPER membership.

Get involved . . . JOIN NOW.

NATIONAL COACHES COUNCIL

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Sports Academies of the NATIONAL COACHES COUNCIL

National Association for Girls and Women in Sport: AAHPER
1201 16th St., NW, Washington, DC 20036

NAME _____
last first initial

ADDRESS _____
street

_____
city state zip

FOR OFFICE USE:

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CK:_____

AAHPER MEMBERS: Membership number as it appears on your journal label: _____

Teaching/Coaching level (please check): College___ Jr. College___ High School___ Jr. High___
Elementary___ Other_____

Please check the Academies you wish to join:* ☐ Badminton ☐ Basketball ☐ Field Hockey
☐ Golf ☐ Gymnastics ☐ Softball ☐ Swimming/Diving ☐ Synchronized Swimming
☐ Tennis ☐ Track & Field ☐ Volleyball

I am willing to serve on an Academy committee: ☐

*AAHPER members: $10.00 per Academy. Non-AAHPER members: $20.00 for one Academy; $10.00 each additional Academy. $10.00 non-membership fee may be applied at any time toward AAHPER membership.

Please send AAHPER membership information: ____yes ____no

NAGWS SPORTS GUIDES COMMITTEES INTEREST INDICATOR

The Sport Guide Committee is endeavoring to broaden its base of personnel and to strengthen services to *Guide* readers. The purpose of this form is to offer readers an opportunity to join us in meeting this need. Please complete this form and send it to the Associate Guide Coordinator-elect, Geri Polvino, Eastern Kentucky Univ., Richmond, KY 40475.

Name _____

Professional Address _____

City _____ State _____ ZIP Code _____

1. Check the Sport Committee(s) which would be of interest to you:

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____ Archery	____ Golf	____ Squash
____ Badminton	____ Gymnastics	____ Synchronized Swimming
____ Basketball	____ Lacrosse	____ Team Handball
____ Bowling	____ Orienteering	____ Tennis
____ Fencing	____ Racquetball	____ Track and Field
____ Field Hockey	____ Soccer	____ Volleyball
	____ Softball	____ Water Polo

2. Would you like to serve as member of a Sports Guide Committee of your interest?* ____ Yes ____ No
3. Would you consider submitting an article to a Guide Committee as a prospective author? ____ Yes ____ No
   Possible topic or title _____
4. Can you suggest topics for articles which you would like to have included in future *Guides*? (Please indicate sport.) _____
5. Are there others whom you would recommend for consideration as possible committee members or authors? Please indicate below. (Use additional paper, if necessary.)

Name _____ Sport(s) _____

Professional Address _____

City _____ State _____ Zip Code _____

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*You may serve on only one Sport Guide Committee at a time.

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*The current *Guide* was prepared by the 1974-76 Committee; The 1978-1980 *Guide* will be prepared by the 1976-78 Committee.

Public Relations and the Tennis Program

PHYLLIS A. JACOBSON

Phyllis Jacobson received the B.S.E. and M.S. degrees at Central Missouri State University, Warrensburg, and the P.E.D. at Indiana University, Bloomington. She is assistant professor of physical education at Marian College, Indianapolis, Indiana. Phyllis formerly coached tennis at Lindenwood College in St. Charles, Missouri.

This time like all times is a very good one
if we but know what to do with it.

Emerson

In today's society, skepticism seems to be the watchword of human interaction. We are skeptical of one another even in uncomplicated matters—written guarantees on products we buy, performance of a duty, workmanship and personal commitment to a cause. Education is no exception to this skepticism, particularly specialized subjects such as physical education, which are undergoing rigid scrutiny on the part of the public. We are in an era when taxpayers consider themselves burdened by continually rising educational costs which they are forced to meet through increased property taxes. The result is an inclination to be skeptical of existing programs and to reject new ones which have no relevancy in the minds of the taxpayers.

Whether or not we agree, we must realize that educational experiences must justify themselves in the minds of these taxpayers. Passive acceptance of education by the public no longer may be expected. Rather, the public needs to be advised of the purposes and rewards of a particular program if we are to gain support. The most beneficial program may fail if the public does not support it. Such support is gained only through an educationally enlightening public relations program.

In order for any public relations program to be a success, there must be a sincere desire on the part of those involved to make it succeed. We must work to dispel the public's negative thoughts toward the educational values of a program such as tennis; public relations should seek to turn negative opinions into positive action. It is far better to expend the necessary energy to actively seek public support by increasing understanding of the values of the tennis program than to be chastised publicly and never gain such programs.

Communication

The one key factor in developing favorable public relations for a program is effective communication. The public must *know* the program before being able to appreciate it. Intelligent use of communicative techniques results in such knowledge. (4) It is difficult for any individual to be completely objective in judging a program when he lacks knowledge concerning it. We as a profession have not effectively succeeded in communicating to the public the values of the tennis program. Acceptance and support of the activity have therefore been lacking. It is important to keep in mind that, more often than not, rejection of a program is caused by lack of knowledge of the program's usefulness and value rather than by outright opposition (1).

Effective communication involves more than discussing the tennis program with others in the department or with parents twice a year at open house; it involves more than an occasional news release to parents. Rather, effective communication must be a consistent, ongoing teacher-parent dialogue in terms of what is actually taking place in the program. This means a willingness by the teacher to get out of the classroom and meet and talk with the public. If we are proud of our profession and the values of a tennis program, we must be willing to communicate the idea.

One of the most effective means of implementing this type of public relations communication is to participate in community life of interest to all citizens. Speaking engagements before the PTO, Rotary Club, League of Women Voters, religious groups and sport banquets are ideal situations for enlightening the public as to the benefits of tennis in our schools. Appearances on radio and television talk shows give the opportunity to reach large numbers of the public in a single presentation. In addition, these audiences often represent a larger cross-section of the public than is normally available to the teacher. In this way, the public gets to know and value the opinion of the teacher and can be made aware of current needs in programming. It is small wonder that the public does not support a tennis program if we as teachers associate only with those in the teaching profession and remain aloof from others who comprise our society (2).

Another effective means of communication is public involvement in the planning and implementation of the program. This means that those participating will become enlightened about the values of the tennis program and will have an effect on all those with whom they come in contact. The result may mean greater support of the program in regard to budgets, bond issues and other vital areas of public support (3). One way to carry out this involvement program is to establish supervisory councils with regularly scheduled meet-

ings. It should be remembered, however, that we must be sincere in seeking such consultation and must give meaning to the process.

Presentation of the benefits derived from a program of tennis on a one-to-one basis is a very effective means of communicating with the public. Discussion with emphasis on the carryover value may be a plus in gaining public support. Many people may have been exposed only to team activities when they were in school. These individuals may have been involved in classes where the emphasis was on athletic ability and where those of lesser ability may have been deprived of a rewarding classroom experience in physical education. This may have left a negative impression and hence a negative reaction to all phases of the physical education program. Enlightenment as to the carryover or lifelong value derived from participation in tennis classes in the schools can reverse such negative opinions and lead to positive support.

Another theme to emphasize is the complete involvement of all pupils in the program—every individual a participant. Those individuals who were left on the sideline to keep score or provide equipment because of a lack of athletic ability may be enlightened and highly supportive of the program when learning that regardless of one's natural ability, each child is capable of attaining success in the sport. Pointing out to the public that each child can find sheer joy in participating effectively at his individual level of ability may reap rewards beyond our greatest expectations.

However, the most fundamental and perhaps most influential communication contribution is effective teaching. *As the child views the classroom, so do the parents view the entire program.* We must be certain, therefore, that we have a sound program of logical progression and complete pupil involvement each time we teach. Our tennis programs must be geared for maximum pupil learning and accomplishment if our public relations effect is to be positive.

Physical educators would do well to take a lesson from business in regard to public support of programs such as tennis. Effective public relations may lead to a better understanding and a greater willingness to support educational pursuits. We must, as a profession, strive to obtain such support through public relations if we want tennis in our schools.

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3. Cutlip, Scott M. and Allen, H. Center. *Effective Public Relations.* Englewood Cliffs, NJ: Prentice-Hall, 1964. 512pp.
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TENNIS TIP

The Educated Wrist

A good tennis game demands a unique balance between relaxation and tension–relaxation and freedom of motion in the swing of the arm from the shoulder and tension and firmness in the wrist as the ball contacts the racket. Wrist control is, in fact, a key to good tennis. The firm wrist is essential on the forehand and backhand drives, the basic ground strokes, and is needed on the volley and the chop.

The absolute opposite, a complete flexibility of wrist, is demanded to serve effectively. The gripping must be done with the fingers in the service grip and the wrist muscles must remain flexible. This same relaxed wrist action is also needed on the overhead smash and the drop shot. It is the educated wrist that will meet the challenge of good tennis.

Functional Budgeting for Girls' Interscholastic Tennis

SHARON L. VAN OTEGHEN

Sharon Van Oteghen is an assistant professor at Southeast Missouri State University, Cape Girardeau, where she coaches the women's intercollegiate tennis team. Her experience includes teaching tennis at the high school and college levels as well as coaching at the high school level. Sharon received her B.A. and M.A. degrees from the University of Iowa, Iowa City, and the doctorate from Indiana University, Bloomington.

Enactment into law of Title IX affords women additional opportunities for involvement in interscholastic athletics. For years, women's teams have "done without" adequate funding which is considered essential to the offering of a quality sports program.

If the director of activities or athletics, the principal and the board of education can be helped to understand and perceive the need for budgetary items which will aid in developing a team, they will likely approve requests considered necessary for new or existing programs.

A functional type budget requires detailed program planning and evaluation with respect to the essentials of a sports program. Specific amounts are requested for budgetary items (without padding the budget) based upon the actual program being offered. Should the coach or athletic director be asked to defend her requests, each amount can then be cited *with reference to provision of a quality program.* It will be clearly evident that if funds are not provided, a portion of the program must be eliminated, thereby lessening the carefully planned experience for the participants.

A comprehensive presentation of the program function and budget for a high school girls' varsity tennis team is shown as a hypothetical situation with inclusion of (1) a letter to the activities director alerting the director to the requests which will be made; (2) a budget summary presenting a brief resume of expenditures requested in comparison with amounts allotted for the past two seasons; (3) function (actual tennis program) showing expenditure analysis and identifying the whys of the monies being requested with an expenditure breakdown and (4) supplementary data to reinforce the need for specific requested funding.

If necessary to defend the budget before the board of education, copies of the budget summary, function and expenditure breakdown and supplementary data may be distributed to board members for

quick referral. This material should provide a comprehensive understanding of the specific items and services for which funding is being requested. Although the budget presentation may be made by the director of activities or athletics, a coach should welcome the opportunity to discuss a specific aspect of the program with members of the board of education.

In the budget format which follows names of high schools and towns are fictitious. Figures, while fairly accurate at the time of the writing of this article will, of course, change with the economy. The figures serve to illustrate the detail of accounting for each dollar spent.

Letter to Activities' Director

Girls' Varsity Tennis Team
Oakville High School
Oakville
Date

Mr. James Doe
Activities Director
Oakville High School
Oakville

Dear Mr. Doe:

Both school and community interest have grown during the past two years in girls' interscholastic tennis. In keeping with a challenging program which will enable the girls to utilize their skills at a high level of performance, I would like to call to your attention a few factors concerning the girls' varsity tennis team.

Select members of the Girls' Oakville High School Varsity Tennis Team have been invited to participate in the district and state meets. These tournaments will be held annually, beginning in the spring of 1978. Participants will include one doubles team and two singles players in the district tournament and one doubles team and one singles player in the state tournament. The trips to Hemlock and to Capital City will require additional funding for transportation, overnight lodging in Capital City and meals.

Warm-up suits (jackets and pants) are also needed for cool fall weather. As you recall, only the basic tennis uniforms were purchased last year.

Transportation expenses for meets within the metropolitan area and other small purchases for the varsity team are similar to those of past years.

A varsity team schedule for spring matches and tournament play is enclosed.

Sincerely,

Girls' Tennis Coach
Oakville High School

Oakville High School Girls' Varsity Tennis Team Schedule
Spring 1978

Date	School (opponent)	Place (location)
Matches		
March 29	Tamarack	Tamarack
March 30	Driftwood	Oakville
April 4	Mapleton	Mapleton
April 6	Pine Acres	Oakville
April 11	Elmwood	Elmwood
April 13	Mapleton	Oakville
April 18	Elmwood	Oakville
April 20	Pine Acres	Pine Acres
April 25	Driftwood	Driftwood
May 2	Tamarack	Oakville
Tournaments		
May 6	Metropolitan Conference	Mapleton
May 13	District	Hemlock
May 20	State	Central City

Budget Summary

Reasons for a major increase in cost between the 1976-1977 and 1977-1978 years include: the addition of one school to the Metropolitan tennis conference; varsity team participation in state and district meets necessitating transportation, meals and lodging; a request for the purchase of new varsity warm-up suits. Because of a rise in the cost of living, expenditure items also show increased prices. The coach's salary is not included as it is a line item in the physical education budget rather than an expenditure in the activities' budget.

Expenditures

Function	Actual	Estimated	Request
Girls' Varsity Tennis Team	1975-1976 $320	1976-1977 $520	1977-1978 $815
	$320	$520	$815
Object			
Services Contractual	$100	$120	$320
Supplies	175	180	200
Materials	00	170	235
Current Charges	45	50	60
	$320	$520	$815
Net Cost			
Expenditures	$320	$520	$815
Receipts	00	00	00
	$320	$520	$815

Tennis Program

Girls' Varsity Tennis Team -
Oakville High School 1977-1978

Transportation for the varsity girls' tennis team must be provided for five "away" meets as well as for the Metropolitan Conference Tournament in Mapleton, the District Tournament in Hemlock and the State Tournament in Central City.

For the metropolitan matches, including the conference tournament, two parent volunteers in addition to the tennis coach provide transportation to the "away" sites. These persons are reimbursed for mileage expenses as well as for a "bus rider policy" which they are required to obtain in addition to their regular car insurance.

For each "home" meet the host school provides eight cans of balls for the playing of seven singles matches followed by five doubles matches. Four singles players and three doubles teams participate in the Metropolitan Conference Tournament. Each school contributes five cans of balls and provides a noon lunch for team members. Six team members are involved in this tournament as players one through four play both singles and doubles.

District and state tournament expenses for the team members and coach include transportation, overnight lodging for one night in

Central City (state meet) and meals (three per person for the district meet and four per person for the state meet).

The girls call their own play for all matches, and the coaches settle any necessary disputes. Balls, tournament entry fees and officials for the district and state tournaments are provided for by the High School Activities Association of which Oakville High School is a member.

Score sheets for each match are mimeographed sheets made up by each coach. Paper is supplied through the Oakville High School office supplies at no expense to the team. A first aid kit for each match is made up by the school nurse and is not included as a team expense.

Acct. Code	Classification	Estimated Cost	Estimated Total	Code Total
2	SERVICES CONTRACTUAL			
21	Transportation 3 cars for round trips to 5 metropolitan meets @ 20¢ per mile (3 cars - 121 miles @ 20¢ per mile)	$ 72.60		
21	Transportation 2 cars for metropolitan tournament @ 20¢ per mile (2 cars - 27 miles @ 20¢ per mile)	10.80		
21	Transportation 1 car for round trip to district meet (134 miles @ 20¢ per mile)	26.80		
21	Transportation 1 car for round trip to state meet (352 miles @ 20¢ per mile)	70.40		
26	Motel lodging: overnight for state meet 3 players and coach (4 persons @ $12.00/ single room; $16.00/ triple room	28.00		

26	**Meals - metropolitan tournament (6 players and coach)**			
	7 lunches @ $2.50	17.50		
26	Meals - district meet: (4 players and coach)			
	5 breakfasts @ $1.75			
	5 lunches @ $2.50			
	5 dinners @ $4.00	41.25		
26	Meals - state meet: (3 players and coach)			
	Friday evening:			
	4 dinners @ $4.00			
	Saturday:			
	4 breakfasts @ $1.75			
	4 lunches @ $2.50			
	4 dinners @ $4.00	49.00		
			$316.35	$320.00
3	SUPPLIES			
37	Tennis heavy duty championship balls			
	5 home meets: (8 cans each meet/40 cans of balls)			
	Metropolitan conference:			
	5 cans of balls			
	Total ball supply: (45 cans /4 cans per dozen = 12 dozen balls @ $13.00 per dozen)	156.00		
37	Chenille award letters			
	10 large letters @ $3.00/5 small letters @ $2.50	42.50		
			198.50	200.00
4	MATERIALS			
44	Team warm-up uniforms:			
	jackets - white dacron and combed cotton: (4 size 12; 4 size 14; 2 size 16) 10 @ $13.50	135.00		

44	Team warm-up uniforms: pants - white dacron and combed cotton: (4 size 12; 4 size 14; 2 size 16) 10 @ $10.00	100.00	$235.00	$235.00
5	CURRENT CHARGES			
51	Bus rider policies (insurance for transporting students) 3 policies @ $20.00	$815.00	$ 60.00	$ 60.00
	Total Expenditures			60.00

Supplementary Data

Description	Unit Price	Total Price
Transportation for round trips to meets		
To Elmwood High School: 3 cars, 14 miles @ 20¢ per mile	$ 2.80	$ 8.40
To Pine Acres High School: 3 cars, 25 miles @ 20¢ per mile	5.00	15.00
To Mapleton High School: 5 cars, 27 miles @ 20¢ per mile	5.40	27.00
To Tamarack High School: 3 cars, 30 miles @ 20¢ per mile	6.00	18.00
To Driftwood High School: 3 cars, 25 miles @ 20¢ per mile	5.00	15.00
District tournament – Hemlock 1 car, 134 miles @ 20¢ per mile	26.80	26.80
State meet – Central City 1 car, 352 miles @ 20¢ per mile	70.40	70.40
		$180.60

Summary

The importance of detail and accuracy in budgeting has been presented. Functional budgeting demands careful planning of the program to be offered prior to making the budget request. Careful planning for all aspects of the program should result in a quality interscholastic experience.

TENNIS TIP

Footwork

Agile, sure feet are essential to good tennis. Jumping rope is an excellent way to improve footwork. Proper footwork enables a player to get in position so that he may execute the stroke smoothly and transfer his body weight forward as he hits the ball. Poor footwork results in costly errors. If footwork is incorrect, it is impossible to make the correct stroke.

How to Organize a Community Tennis Club

ALLYS SWANSON

Allys Swanson received her B.A. and M.A. degrees from the State University of Iowa, Iowa City. She has taught and coached tennis for many years and has served as administrator of the Saint Catherine's Tennis Club since its beginning. Currently, she is associate professor and chairperson of the physical education department of the College of Saint Catherine, St. Paul, Minnesota.

One of the major problems for the tennis enthusiast today is getting a court. With the interest in tennis booming at all ages and skill levels, this problem is going to be with us for a long time. To help our students and community get court time and to aid in the promotion of tennis as a sport, a tennis club has been organized and operated successfully on our school's courts during the summer for the past three years.

A tennis club is an organized approach to providing court reservations, lesson programs and supervision and maintenance of the tennis facility for a fee paying membership. School courts offer a ready facility for a club organization if left unscheduled during the summer. The income from the nominal membership and lesson fees is necessary to pay the wages of the staff and provide the membership with maximum use of the tennis facility through reservations and supervision.

Pre-season Considerations

Before the season starts, the following tasks should be completed:

1. Installation of a plug-in phone at the courts for reservations.
2. Printing of reservation forms, membership application blanks, membership cards, publicity posters and lesson registration material.
3. Launching the promotional campaign through a feature story in the local paper coupled with a membership application clip coupon and lesson registration information.
4. Hiring the necessary staff: one club manager, one teaching head, and four or five court supervisors. The amount of staff will vary with club membership and lesson enrollments. This size staff served 200 members.
5. Ordering tennis balls for the lesson program.

Staff Job Descriptions

Job descriptions for the staff will vary according to the elaborateness of the facility. Our club operated with five tennis

courts. There were no dressing or showering facilities and no clubhouse or food facilities.

The club manager is responsible for processing all club membership applications, handling lesson registrations, scheduling court functions ranging from private, semi-private or group lessons to court supervisors' work schedules. The manager turns in all time cards, attends to all maintenance requirements, maintains a continuous up-to-date budget and generally oversees the adherence to club policies by staff and membership. Club policies are needed for the following procedures: reservations, cancellations, guests, payments, refunds, court etiquette, hours of work, attendance of staff, over-all hiring practices, wages, relations with co-workers, membership and overall smooth operation of the club. A year-end report that includes a final financial statement and guidelines and suggestions for the next season should be written by the club manager.

The manager's job is very important and can be filled by the school's tennis coach, physical education teacher or other qualified person. It should be salaried accordingly.

The head teacher is responsible for content of the lessons, materials needed for teaching and teaching the private, semi-private and group lessons. Any additional teachers for the group lessons should report directly to the head teacher. The head teacher is also responsible for the end-of-the-season club tournaments.

The court supervisors are on duty at the courts during the open hours of the club. They are responsible for sweeping the courts daily, keeping the facility clean and neat, drying the courts as quickly as possible after rain, taking phone reservations and getting members on their reserved court at the proper time. Occasionally, they play tennis with members who have come without partners. Some court supervisors are also qualified to serve as assistant teachers.

Post-season Considerations

Post-season considerations include sending a letter of appreciation to club members and offering them priority for the next season's membership. Since there is a limited number of tennis courts, the membership must be limited if the objective of maximizing court play is to be met and the membership is to be happy with the club organization. A workable range is 20 to 50 members per court depending on the activeness of the membership.

All forms, phone, and other materials should be stored, And, of course, have a staff party.

Summary

To set up a similar type program on public school facilities with five or more tennis courts, the author recommends that the

administration be handled as an outgrowth of the adult education office and treated as a public service by keeping the fees nominal.

The St. Catherine Tennis Club, which is operated on the private college's courts, has been extremely successful the past three years in promoting tennis and good community public relations and the members are thankful to have a place to play without having to wait for hours.

Group Tennis Instruction for Elementary Grade Children

JAVENE ANN YOUNG

Javene Ann Young received her B.S. degree from State University College, Brockport, New York, and M.S. and Ed.S. degrees from Eastern Kentucky University, Richmond. She is an instructor at the University of Kentucky, Lexington, in the areas of elementary physical education and sport skills.

The time to introduce tennis is in the elementary grades! This instructional program should begin in kindergarten and continue through high school.

The elementary tennis curriculum is best illustrated in phases; the first is a basic movement phase. It consists of experiences in those movements which are fundamental to all movement experiences in life. It also consists of experiences which provide knowledge about factors that affect fundamental movement. Laban (3) has analyzed movement and from this analysis those movements which are fundamental and those factors that affect movement have been discerned. Since basic movement programs (1, 4) are available to the teacher, the connection between this phase and specific phases of tennis instruction merit identification. Those factors that influence fundamental movement also influence all movement no matter how advanced they are.

A few of the factors that affect movement will be described to point out the connection between basic movement and the development of tennis skills. In the basic movement program the force factor will be thoroughly explored. The child will explore applying different amounts of force and also applying force in different directions. Tennis requires applying force in specific directions and in specific amounts. Transfer of weight is another factor to be explored in basic movement. The transfer of weight from the back foot to the front foot is a specific part of all tennis skills. Relationship is another factor to be studied in basic movement. Specific relationships (partner, opponent, object) are needed in tennis. These are but a few of the connections between this phase and the next phases. It is up to the teacher to make herself familiar with these experiences so that children will have a firm basic movement background which will lead easily into the second phase of the tennis progression.

The second phase is directly related to specific skill development. It involves drawing forth specific striking patterns and is summarized

in the outline that follows the body of this article. Phase two begins in third grade with exploration, individual development and cooperative activities. Through verbal cuing selected use of equipment and space, the striking patterns used in tennis can be discovered by children. The hand can be used as the implement at first, and later the racket can be introduced, using the same progression.

The third phase which should be initiated at the fourth or fifth grade level includes cooperative, self-testing and competitive activities. Correct mechanics of execution should be stressed to a greater degree than in the first two phases. Rules and strategies of tennis should be taught also in the third phase.

The following outline depicts phase I, phase II, and phase III of a group instructional program. Phase II and phase III include information needed as to the type of equipment, use of space, verbal cues and major points of emphasis. The teacher, after using these ideas, can expand them to meet the needs of her students.

Phase I is brief as movement education programs are available to the teacher. The cues reflect examples which enable the teacher to see the connection between this phase and specific phases of tennis instruction. Phase II and phase III are outlined as follows: striking pattern to be discerned, equipment and space needed, verbal cues to be used, explanations of those cues in parentheses and other experiences included in each phase, as well as principles to be emphasized

I. Phase I (kindergarten through third grade)

A. Sampling only of movement challenges and the movement factors involved which show the relationship to the next two phases (no progression suggested)

1. Challenge: Strike the ball toward the wall. (Use all size balls.)
   a) Movement factors
      (1) force
      (2) direction
      (3) striking
2. Challenge: Use sliding steps to move sideways. Try sliding both to the left and right.
   a) Movement factors
      (1) direction
      (2) slide
3. Challenge: Bounce the ball and catch it at waist height.
   a) Movement factors
      (1) level
      (2) object relationship

4. Challenge: Bounce the ball and as it reaches waist height, strike it toward the wall.
   a) Movement factors
      (1) striking
      (2) direction
      (3) level

5. Challenge: Strike the ball so your partner can catch it.
   a) Movement factors
      (1) partner relationship
      (2) force
      (3) direction
      (4) object relationship

6. Challenge: Strike the ball so that it goes high in the air.
   a) Movement factors
      (1) direction
      (2) force
      (3) striking

7. Challenge: Strike the ball so that it hits the wall. Let it bounce once and then catch it at waist height.
   a) Movement factors
      (1) striking
      (2) level

8. Challenge: Stand with your feet together. Rock from the balls of your feet to the heels and back to the balls.
   a) Movement factors
      (1) transfer of weight
      (2) rocking
      (3) body awareness

9. Challenge: Stand with one foot forward. Move all your weight onto your front foot. Now move all your weight onto your back foot. Now rock from one foot to the other.
   a) Movement factors
      (1) transfer of weight
      (2) body awareness

10. Challenge: Run quickly toward the wall and then run backwards as quickly as you can to the spot where you started.
    a) Movement factors
       (1) speed
       (2) spatial awareness
       (3) run

B. Equipment and space needed
   1. balls
      a) light balls such as large yarn balls, balloons, rubber balls
      b) many different size balls
   2. large wall space

II. Phase II (third and fourth grade)

A. Striking pattern (forehand)
   1. Equipment and space needed
      a) balls suspended on string at waist height (Use volleyball standards and rope suspended between.)
      b) light balls such as yarn balls and light plastic balls six to eight inches in diameter (Heavier balls tend to cause an underhand striking pattern.) (2)
      c) racket to be of light weight material such as plastic (Heavy racket tends to elicit an underhand striking pattern.) (2)
      d) large wall space with lines three feet and eight feet from the floor (Hitting between these lines tends to draw out the sidearm striking pattern.) (2)
      e) line drawn 10 feet from wall on floor.
   2. Verbal cues
      a) (suspended ball at 10 foot line and racket) Get a ball, stand with your left side to the wall and place one foot on each side of the line. Take your racket straight back and strike the ball toward the wall. (Allow student to explore many times.)
      b) (yard ball for each child) Stand at the 10 foot line with your left side to the wall. Strike the ball so that it will hit the wall between the two lines on the wall (3 feet and 8 feet).
      c) (increase the distance from the wall) Move back five large steps. Strike the ball so that it will hit the wall between the two lines on the wall. (This should begin to elicit use of total body force rather than just arm force.)
      d) this time take a step toward the wall as you hit the ball, keep your back foot still.
      e) (lightweight ball that will bounce) Drop the ball and hit it to the wall after the bounce.
      f) try to hit the wall between the two lines as you hit it after the bounce.
      g) (ball that bounces) Move to the 10 foot line keeping the sidestride position. (Be sure children

understand this term.) See how many times you can hit the target (between the 3 foot and 8 foot lines) without having to catch it.

h) with a partner, strike the ball so your partner can catch the ball. Keep the ball below high level (high level is above head level).

i) with a partner toss the ball so your partner can bit it back to you after it bounces once. Keep the ball below high level.

j) now with your partner hit the ball back and forth to each other keeping it below high level and letting it bounce at least once before hitting it.

3. Emphasize (These points should be emphasized to individual children as needed in all grades. *Remember positive feedback is better than negative.)*
   a) Back swing is parallel to floor. (4)
   b) Follow through in direction of hit.
   c) Keep weight on front foot as ball is hit.
   d) Hit behind ball rather than under it.
   e) Keep elbow away from body. (4)
   f) Hit through center of ball. (4)
   g) Watch ball as it is hit. (4)
   h) Ball goes from left side to wall or to partner.
   i) Contact ball at waist height.
   j) Emphasize cooperation not competition.
   k) A comfortable grip may be used or a grip may be described.

B. Striking pattern (serve)
   1. Equipment and space needed
      a) Same as for sidearm except that ball should be adjusted when suspended so that it can be hit at child's full upward reach.
   2. Verbal cues
      a) (suspended ball at 10 foot line and racket) Strike the ball as if you were hitting it downward and toward the wall. (Allow child to explore many times.)
      b) (yarn ball for each child) Stand with your left side to the wall at the 10 foot line. Toss the ball over your head and strike the ball towards the target. (Between three foot and eight foot line.)
      c) now keep the same target but farther from the wall.
      d) (late third grade) Using suspended balls, see if you can hit the ball harder by swinging the racket arm

in a circle; start with the racket in front of you and swing it down and around in back of you before you hit it.

e) (yarn ball) Use a toss and full swing to hit ball to target, between 3 foot and 8 foot line.

C. Striking pattern (backhand)

1. Equipment and space needed
   a) Same as for forehand
2. Verbal cues
   a) Stand with right side to net and place left hand below right hand on racket, strike ball toward wall.
   b) (experiences can be the same as for forehand except ball is on left side of body.)
3. Emphasize
   a) Same as for forehand except right foot is front foot, right side to wall or partner.

III. Phase III (fourth through sixth grade)

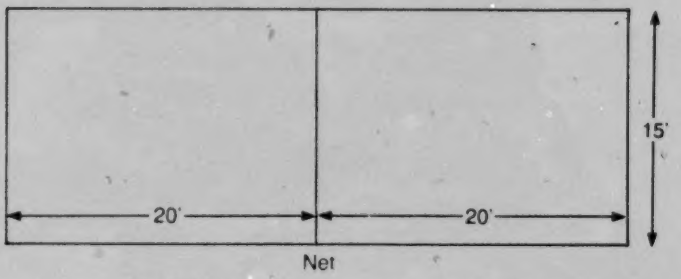
A. Striking Patterns: Forehand, backhand, serve

1. Equipment and space needed
   a) A paddle racket can be used by most children and a tennis ball can be used by some. Note–some children will be able to handle a tennis racket and should as soon as possible.
   b) court space (inside or out)
   c) large wall space
2. Verbal cues and experiences (emphasis on self-testing activities)
   a) Bounce the ball to yourself and strike the target five times in a row. Catch the ball each time before hitting it back.
   b) If you can do a), hit the target five times in a row without catching it.
   c) If you can do b), choose a partner and see if the two of you can strike the ball back and forth five times in a row. Keep the ball below high level.
   d) (Increase the number of times task is done to provide a progressively more difficult task.)
3. (serve and progression of self-testing activities)
   a) Serve from the 10 foot line and hit the target five times in a row.
   b) Move back five steps and serve the ball to the target five times in a row.

c) (paddle tennis court) Using a paddle ball, serve the ball to the service court five times in a row.
d) (increase the number of times task is done to provide a progressively more difficult task.)

4. a competitive game (4)
   a) Court is described in Figure 1.

Figure 1.



   b) Ball is bounced to self and hit into opponent's court from behind the endline.
   c) Opponent must return ball to opposite court after ball bounces once.
   d) Any method of scoring may be used but this is a good time to introduce the official method or allow children to develop their own method of scoring.

5. Emphasize
   a) same principles as in other grades but with greater degree of emphasis.

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Help! No Room!

MICHELE STERN

Michele Stern, an assistant professor of health and physical education at Bronx Community College New York City, is coordinator of women's athletics and coach of the women's tennis team. Michele received her B.A. degree from Hunter College in the Bronx and her M.S. degree from Brooklyn College. Being a college varsity tennis player and active tournament player, she has been instrumental in developing the tennis instructional, intramural and intercollegiate programs at Bronx Community College.

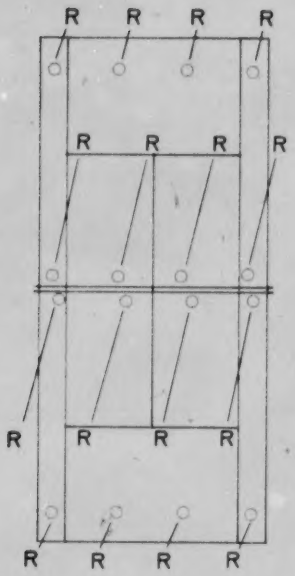
A basic problem which faces most inner city school and college tennis instructors on a beginning level is how to accommodate the large number of participants when only limited facilities are avilable. When 20-35 students must play on two or three courts, it is difficult to maintain interest and expect real learning to take place. The key to this problem is to keep the students and the instruction moving in a steady progression which provides fun, quick analysis, reward and all around safety.

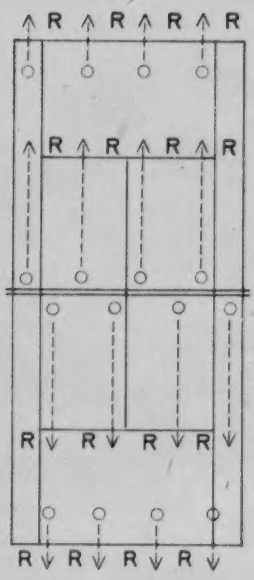
People-To-People Drills

The following two drills are designated as people-to-people drills and are performed after the forehand and backhand motions have been taught. The drills can be set up on one or two courts using the baseline and/or service box lines on both sides of the court thereby allowing a maximum of 32 people to participate. (See Figures 1 and 2.) Note: rackets are not used in the drill.

In the first drill one person acts as the tennis ball and the other as the racket.

1. Place students (without rackets) on court as shown in Figure 1, with partners.
2. The person acting as the "Racket" times her backswing to the person acting as the "Ball," who moves with her back toward the "Racket." (See Figure 2.)
3. As the human "Ball" gets into contact position to the forehand or backhand side of her partner the "Racket" follows through pushing the human "Ball" forward and gets back into the ready position. This gives the player the idea of hitting through the ball while shifting weight and keeping the wrists firm because of the weight being pushed.





○ Human Tennis Balls

R Human Rackets

/ Partners

---→ Movement of Ball toward Racket

Figure 1.

Figure 2.

The purpose of the second drill is to develop strength in the wrists and to encourage beginners to keep the wrists firm during the drives. It is set up like the first drill.

1. Have partners face each other with enough room to execute a forehand or backhand drive without the rackets.
2. Slowly, as they follow through, their hands meet (right with right, left with left) palm to palm, weight on their lead foot, knees bent and eyes watching the contact point.
3. Both partners push against each other's hands at waist level for the count of five, keeping the wrist straight, and continue into a

ready position. Partners must be matched according to whether they are right or left handed.

Paper Drill

A paper drill may be performed on one to three courts, or indoors if weather is poor. Surrounding fences may be utilized to reduce interference with other students on the court.

The paper drill was originally devised because of the poor control beginners have over the direction of regular tennis balls and the large number of players in each class. This drill will provide the beginner with eye-hand coordination and the idea of hitting a moving object (which resembles a tennis ball).

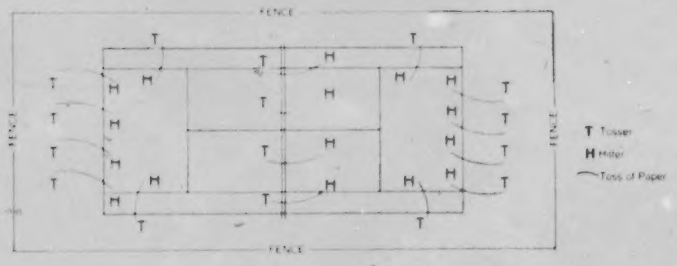


Figure 3.

1. Crumble a couple of sheets of paper into a ball (three balls per player).
2. Have each student work with a partner, one tosser with one hitter. (See Figure 3.)
   Note: Paper doesn't travel far on a toss. The tosser must be in a position directly opposite the point of contact of the forehand or backhand drive and approximately two racket lengths away from the hitter.
3. The player should be in the pivoted position with the racket back in the backswing ready to move into the ball and back into a ready position.
4. The player executes a forehand or backhand drive depending upon the toss. (The entire class may perform the forehand first and then the backhand if the conditions are too crowded.)

Hit-One Rid-One

Following the teaching of the forehand and backhand drives and volleys a "hit-one-rid-one" drill may be introduced. Twleve players may use one court (Figure 4). On one side are players (P) and the other side setters (S).

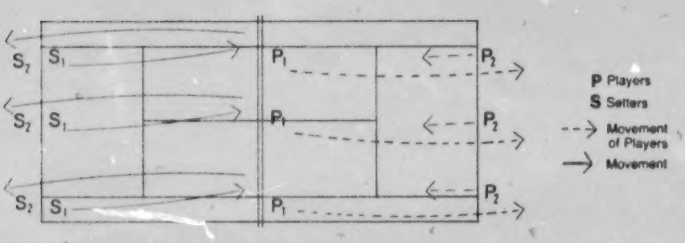


Figure 4.

1. Both setters (S1 and S2) are near the baseline with setters that have two tennis balls each.
2. One player (P1) is at net position and one near the baseline (P2).
3. S1, from the baseline hits a ball to P1 for a net volley. After volleying P1 retreats behind P2 who is at the baseline, S1 comes up to net and gives P2 either a forehand or backhand drive. S1 quickly retreats behind S2 at the baseline who now becomes the setter. P2 has moved up to the net for the volley. The setter waiting at the baseline may retrieve the balls just hit.
4. Continue the drill until each player gets 10 net volleys and 10 ground strokes. Players then becomes setters and setters become players.

Circuit Drilling

A circuit drill provides a designated number of stations on a court. This particular drill provides for eight stations. Forehand and backhand drives, forehand and backhand volleys, the tossing and body motion for serve and the flat service are included in the practice experience. Fences surrounding the court are utilized within the circuit stations. Players move in a clockwise direction after practicing five minutes at each station.

Station 1 – Forehand drive into fence, student tosses ball to herself
Stations 2 & 3 – Forehand volley across net within serving boxes
Station 4 – Tossing and serving motion
Station 5 – Serving into the fence from behind baseline
Stations 6 & 7 – Backhand volley over the net
Station 8 – Backhand into the fence with person tossing to herself

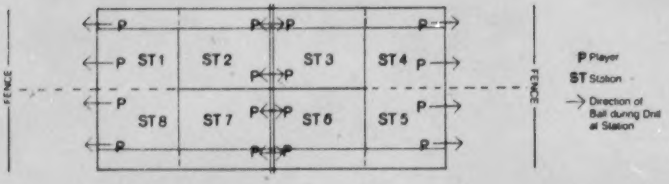


Figure 5.

These drills have been used effectively in beginning tennis classes in the inner city schools. Usually the class size ranges from 20 to 30 students. The average number of available courts is one to three per school. These drills meet objectives of conservation of space, progression of instruction, movement of the students and safety. Students are able to have immediate self, peer or instructor analysis of their skills. These drills enable a beginner to experience early success in performance of strokes which require both correct mechanics and kinesthetic awareness. Even with the over-crowded situations in many cities, these drills do work with little room to spare.

Teaching the Tennis Serve First

KATHLEEN CORDES

Kathleen Cordes has been a competitor and member of tennis clubs and has taught in city recreation programs and at Ramey Tennis School. She received the B.S. degree from Indiana University, Bloomington, where she played on the tennis team for three years. Her M.A. degree was earned at Ball State University, Muncie, Indiana. She coaches tennis at Hanover College, Hanover, Indiana and is a member of the Indiana Women's Intercollegiate Sports Organization Tennis Advisory Board.

Many consider the tennis serve to be the most complicated stroke in tennis. An intermediate or advanced player would indeed discover that it is most difficult to master efficiently. For the beginner, however, it can actually be the easiest stroke to learn. It is similar to throwing a baseball, and the only shot in which the ball has not been delivered by an opponent. Only the server is involved with tossing the ball and contacting it in a relatively stabilized position.

Presenting a new activity creates fresh interest and determination among students. This is an ideal time to take advantage of their eagerness and concentration. To start the class with more flare than bouncing the ball up and down with the racket, allow students to get into the spirit of the class by rallying with one another. They are familiar enough with tennis to do this, and no serious incorrect habits are likely to be formed during one 45-minute class period. This type of practice also provides the instructor with an opportunity to view individual abilities.

Devote the next several class meetings to service instruction, allowing each class to progress according to the ability of the students. A good ball toss and correct form may be accomplished by serving to a surrounding court fence.

Accuracy

Accuracy is introduced by allowing the students to serve into the service courts. Right-handers should learn to serve from the right side to the right court, while left-handers will serve from the left side to the left court. More immediate success will result from this positioning because of a small natural curve caused by a slight slice given to the ball from a flat stroke with the forehand grip when serving from this diagonal. This curve will aid in control as it will give the ball a longer traveling path, bettering the probability of its landing in the service court. Thus, the student will gain confidence

and practice before moving on to the opposite side, where the natural curve is absent, and the serve is more difficult.

Rhythm and Force

Emphasize rhythm and force. Encourage students to aim toward the service line or even a little beyond. It is much easier to shorten a serve than it is to lengthen it, just as it is easier to add accuracy to power on the ground strokes.[1] Some students may need to be moved in from the baseline if they lack the proper strength or are consistently lobbing the ball over the net.

Scoring

Scoring, competition and control can be additional objectives during the instructional phase of the service. Students enjoy competitive aspects of tennis which are initiated by the introduction of scoring. The server is allowed two serves as in a regular game. If one of the two serves lands in the correct service court, the score becomes 15 to love. If a double fault is committed, the score is love 15 and so on until a "game" is completed. Competition is based upon service accuracy and control. Scoring, including deuce games, is easily understood by students who are given an opportunity to realistically utilize that which they have learned before being placed in a game situation. This also provides an excellent time to teach the return of serve.

Practice

After the mechanics have been learned, the serve must be practiced regularly so that it will become an effective weapon and prime offensive tool. It is difficult for students to develop the discipline to practice the serve after the more active ground strokes have been taught. The beauty of teaching the serve first is that students can and do become conditioned to practice the serve just before and after class or anytime that is convenient for them, since it can be practiced without an opponent. It can be fun and challenging to master.

Summary

Teaching the serve first will allow students time during the entire length of the course to develop a powerful first serve and a reliable second serve. Some students can be given an opportunity to progress further by practicing placement, and the most advanced can be changed naturally to the left-bevel grip (approximates the backhand

[1] Billie Jean King and Kim Chapin, *Tennis to Win*, (New York: Pocket Books, 1974), pp. 48, 73.

grip) for spin. If students are introduced to the left-bevel grip before experiencing the forehand service grip, they tend to become discouraged with their serve. The strength and control required for this grip present a problem for many pupils. Their serves curve to the left of the service court. A tendency to compensate results in incorrect form.

Serving has never been more important in tennis competition than it is today. The current emphasis is on the "Big Game," consisting of a powerful serve followed by a volley. The serve is essential to this winning technique and must be practiced early in the course, so that progress will be made toward development of a strong slice serve.

Too often teaching the serve is saved until students are about to embark in games. By then they are too eager to win to have patience with their serve. The fact that a grade often awaits a student at the end of a class tournament further forces her to sacrifice correct form and technique.

It takes *time* to develop a serve. In order for the game to be more fun, a tennis player needs to be confident of her serve rather than frustrated by it. A player with a good serve is a welcome member of any tennis group or club. In singles tournament play, it is the player who wins the games she serves who will never lose a match!

Considerations for Warm-up and Match Play

PATRICIA ANN SHERMAN

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The warm-up period prior to match play is generally not more than 5 to 15 minutes in length. This time period, however, is very important! Tennis is one of the unique sports in which opponents warm up each other instead of waiting until the first few minutes of actual game play to meet face to face. Each player has an excellent opportunity to size up her opponent prior to the beginning of game play as well as the opportunity to evaluate her own game. During this time period, a player should be analyzing various aspects of her opponent's game while developing her own mental set and concentration in preparation for match play.

Each player should be able to detect weaknesses in her opponent's game, while practicing variations in her own stroking. This can be accomplished by hitting variations in drives (deep, short, fast, and slow) while mixing them with chops, slices, lobs and drop shots. The player should note the opponent's form, footwork, court positioning and return placements.

She should ask questions such as: Does the opponent hesitate before hitting any of the shot variations? This is a strong indication that the opponent does not prefer that type of shot. What does the opponent do with a mid-court shot? Does she move in and place it deep to a corner and then come in for the volley, or does she move up to hit the short shot and then retreat to the baseline or remain at mid-court? This simple maneuver will tell you a great deal about her confidence in her net playing ability. Does she return speed with speed, or is there a timid return of a fast drive? Is there a set pattern for the opponent's approach shot from a short drive? Does the opponent vary her passing shots? Does she run around any stroke? What does the opponent do with a lob and to where and how does she like to play it?

Following is a check list of questions which concern the techniques and attributes for which each player should be looking in her opponent's play prior to and of course throughout match play:

General Attributes

1. Is the opponent able to maintain good court position?
2. Is the opponent able to anticipate where the next shot is coming?
3. Is the opponent able to handle various types of spin including top, back and side?
4. Does the opponent lack confidence?
5. Is the opponent overweight or lazy?
6. Is the opponent exceptionally fast?

Basic Strokes

1. Notice should be made of the opponent's form on all strokes.
2. Does the opponent run around any strokes?
3. Which strokes are weak?
4. Can the opponent hit an overhead effectively?
5. Does the opponent have a strong serve?
6. Can the opponent lob effectively?
7. Does the opponent volley well?
8. Can the opponent effectively hit all types of shots?

Likes and Dislikes

1. Does the opponent like to run?
2. Does the opponent hit well on the run?
3. Is the opponent able to handle low balls well?
4. Does the opponent handle high balls well?
5. Does the opponent like to hit soft balls?
6. Does the opponent like to hit hard balls?
7. Does the opponent like to play the net?
8. Does the opponent like to lob?

Placements

1. Is the opponent able to place drives near the baseline?
2. Where does the opponent usually hit her passing shots?
3. Where does the opponent place service returns?
4. What does the opponent do with a high volley and a low volley?
5. Where does the opponent place the serve?
6. Where does the opponent place overheads?

Style of Game

1. Is the opponent weak at the net?
2. Is the opponent a baseline player?
3. Does the opponent play the net continuously?

4. Is the opponent steady or erratic?
5. What speed is used by the opponent in rushing the net?
6. Does the opponent hit with great speed?
7. With what height does the opponent's ball clear the net?

With this basic knowledge a player may take advantage of her own strengths and her opponent's weaknesses by utilizing the following suggestions:

1. If the opponent has poor form and footwork, she should be forced to hit on the run. This can be accomplished by forcing her to return low shots which have been hit to the corners or by hitting the ball very deep and directly at her forcing her to move quickly in order to make a good return. Sharp angled crosscourt shots are very effective against the player with poor form and footwork, for besides causing her to hit on the run they also tend to pull the opponent out of position for the next shot.
2. If the opponent runs around a weak stroke, she can be played in one of two ways--(1) play her weakness until she has moved out of position in an attempt to cover her weakness and then hit to her strength or (2) hit to her strength and then to her weakness when the point is needed. It is more demoralizing if you can break the opponent by playing her strength.
3. A player who enjoys baseline play should be brought up to the net. Then the following things should be tried to test the net player's ability: (1) if the player seems unsure of the volley, the ball can be hit very hard and directly at her; (2) the player's overhead ability can be tested by hitting a lob to see how she plays it; and (3) the player's ability to move into position and to place speed on the volley can be tested by hitting soft angled shots.
4. When playing against a player who continuously plays the net position, the backcourt player should either lob over the net player's head or advance to the net herself. She must force her opponent away from her strongest attacking position.
5. If a player is playing against a steady defensive type player who seems to get everything back, she must force her to err. Pressure can be placed on her by hitting deep into the court and to the corners and by taking the net position as often as possible. This will force the opponent to hit a good return and the net player will be in an excellent position for a put-away shot on any mistake the opponent does make. The opponent should also be forced to run as much as possible, tiring her both physically and psychologically.
6. If a player is having difficulty controlling her returns against great power, she should simply attempt to keep the ball in play.

This can be accomplished by hitting the ball deep into the opponent's court and right back to the position from which it was hit. Seventy-five to 80 percent of all points end in error rather than winning placements. The ball should be kept in play as long as possible to give the opponent a chance to err.

7. Each stroke which a player makes should be hit with the specific intention to attack, to maneuver or to defend. A player should force the opponent to play *her* game; she should not be forced to play the game the opponent enjoys. A slowly hit ball which is intelligently played will be more effective in the long run than one depending upon speed alone. A player should have a definite intention and placement in mind for every shot, using her intelligence to make wise use of all her potential weapons.
8. Change of pace is also a very important factor in match play. This can be obtained by mixing chops, slices, lobs, drops and drives within the same rally. Long rallies can be broken by mixing combinations of strokes. Above all a player should use her imagination; she should not stick to set patterns.
9. The basic cardinal rule of any type of competitive situation is that a player should never change a winning game and she should always change a losing one. Very often an inexperienced player will have a commanding lead on her opponent and will then decide to try a few different techniques which result in allowing the opponent a chance to get right back into the match. A player must continue to keep pressure on her opponent. Never change something which is working! The reverse is also true. If a player is being beaten why not try a different approach, for after all, she has nothing to lose and everything to gain.
10. A player must also learn to play within her ability on the day of the match. She should not attempt shots which she does not know and she should avoid using shots which are not working for her on a particular day. Instead of getting down on herself for making mistakes on a particular shot she should capitalize on the phases of her game which are working and minimize as much as possible her weaknesses on that particular day.
11. Players should play to win, never simply to avoid losing. Fear of loss has defeated many good players. A good tennis player never considers herself defeated until the last point has been played. One of the qualities which stands out in a great player is courage, the spirit which helps to win close matches and to pull out others which seem to be lost. A player should respect the opponent's ability, giving her credit for well-played points and spectacular shots. A player should play to win, but without the fear of defeat. As Paret states in his *Psychology of Advanced*

Play[1], "believe you can win, and you will; fear that you'll lose, and you're lost."

12. Concentration is vital to learning tennis and even more vital during competitive play. Signs of lack of concentration may be failure to watch the ball at all times, not moving into position quickly, hitting on the run, and poor usage and placement of strokes. Each player must train herself to concentrate and to place added pressure on her opponent. Concentration means giving undivided attention to each and every ball which the opponent strokes and every ball which she is returning. Concentration aids include: (1) playing each point as if it were as important as the last point in a game or a match; (2) keeping both eyes focused on the ball from the time the point begins until the point has ended; (3) preparing immediately to return the opponent's shot as the ball leaves the opponent's racket and (4) moving immediately into good ready position after completing each shot.
13. The player with a calm determined nature who can control her temper and her shots, is the player who will be able to go far in the world of tennis. A player must have perfect concentration throughout match play. Nothing can detract from a player's concentration and efficiency more than an uncontrollable temper, conceit, or playing to the gallery.

Each time a player plays a match she should gain something. She will definitely discover weaknesses of which she was not aware, for her opponent will note these weaknesses and capitalize on them. She will learn to play against many different styles of play and further gain experience in how to handle each most effectively. She will also gain added knowledge as to which types of shots to play in certain game situations and how to pull out the most crucial points. If each player reflects on some of the points which have been mentioned in this article, each match which she plays can become more fruitful, enjoyable and challenging.

[1] Jahial Parmly Paret, *Psychology and Advanced Play of Lawn Tennis.* (New York: The American Lawn Tennis, Inc., 1927), p. 226.

A Lesson in Strategy and Tactics

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If there were a "fundamental law" of playing winning tennis, it would be "place the ball where your opponent is not."

The "fundamental law" applies equally to beginners, intermediates and advanced players; the only difference lies in the execution of skills. Hence, the beginner should have no plan except to make the rallies last as long as possible. The intermediate player starts to develop an elementary plan, force the play more, strive for greater depth and placement while still relying on steadiness. The advanced player who has mastered all the skills is ready to use all the tactical tricks that are known to the match player.

When play is ready to begin, you will find yourself in one of five playing situations: *serving, returning serve, rallying from the backcourt, going to net* or *facing your opponent at the net.* Each situation requires some kind of tactic that will break through the defense of your opponent and allow you to make the winning shot.

Serving

Whatever level player, you must observe these rules:

1. Strive for the highest percentage "in" with the maximum speed this allows.
2. On first serve use variety in placement.
3. Strive for consistency on second serve plus accuracy and depth.
4. Seek out opponent's backhand in most instances.
5. Serve down center line frequently to avoid the angle return.

More specifically, for the intermediate or advanced player, however:

1. Determine as soon as possible what weakness, if any, your opponent has in returning the various serves. Mix up the serves to work on these weak areas.
2. Know your own ability to vary the serve with speed, spin and placement, and avoid faults.
3. Notice the court surface and consider reaction changes.

Returning Serve

The most important factor is to *get the service into play.*

Receiving position. Generally, you should stand on a spot that bisects the two extreme service possibilities.

Watching the ball. Fix your eyes on the ball in the server's hand as she prepares to toss. At the same time, observe the direction of the racket swing; notice the change in ball direction as it is hit. Make an immediate move to the appropriate position.

The beginner does not have to concern herself with where to return the serve as long as it is in. The intermediate player is more concerned with where she returns the ball. For the advanced player, however, where she returns the serve is one of the most important shots she has to make.

Where To Return the Serve

Against a server consistently rushing net. All returns should be low.

Against the server who does not rush the net. The most effective shot is the deep shot to the server's backhand that will force her to move backwards after she has served.

Rallying from Backcourt

The beginner player should have no interest in getting to net. The strategy always is to remain steady and wait for the error of her opponent. The intermediate player is mildly interested in approaching net and should come to net if she has to, but may still be too inexperienced to adopt this as the percentage way to win points. The advanced player, however, must work her way to that position because if she doesn't, her opponent will.

Strategy of Backcourt Play

1. Concentrate on consistency, accuracy and depth.
2. Exert great patience.
3. Hit to weakness.

What To Do If Your Position Is Weak

1. The crosscourt is the best defense since most weak positions occur when you are driven wide to one side.
2. If strongly pressed to backcourt with opponent's volleys and overheads, the lob may be the most effective shot to stall off your opponent's "kill."
3. In general, return the ball to a place that gives you the shortest run back to your waiting position.

How To Take the Offense

1. Keep the ball deep on the weak side until the opponent hits a short ball, then approach down the line deep or to her weak stroke.
2. Hit wide angled shots to move the opponent out of position, then approach to her weak position or to her weak stroke.
3. Mix up deep down-the-line shots with short angled crosscourt shots until out of position, then approach through her weak position.
4. Use deep slow balls to the middle of the court at every opportunity.
5. When you see you have hit the proper deep shot to the weak side, take one or two steps forward in anticipation of a weak return.
6. Play the strong side sometimes to exploit the weak side, as for instance, against one who likes to run around her backhand.
7. Consider the percentages of the girl with the powerful but erratic forehand versus her weaker backhand that is very steady and vice versa.
8. Don't hug the baseline by refusing to move back on deep shots and gambling on a half volley or other weak return from the baseline.
9. Consider the drop shot, but only when close enough to the net to execute it with a high degree of success and when able to cover a drop return.
10. Anticipate unusual spins and slices used by the opponent and be ready to hit them on the rise.
11. Play the wind, using it to advantage.
12. Lob often.
13. *Use the strategy of surprise.*
14. *Use the strategy of change of pace.*

Going to Net

Approach the net, expecting a short shot. The purpose of this move is to get the opponent into difficulty from which she cannot

recover; however, it is advantageous only to the player who knows why she went to net and what to do once there.

What Is the Strategy?

1. Go in on a strong stroke, not a weak one.
2. If the opponent's short shot happens also to be very wide, you may have to avoid taking the net on this shot but instead hit a crosscourt in order to recover your own position.
3. Do not attempt to approach the net unless you are hitting the approach shot from a point inside the baseline.
4. If the short ball is to one side or another, approach down that side in nearly every instance.
5. If the short ball is in the middle of the court, you have the option of approaching through the opponent's weak position or to her weak stroke.
6. When the opportunity to approach occurs, move up and take the ball as high on the bounce as possible to hit down.
7. As the approach is made, move up as far as possible for the first volley, but stop and be ready for the next shot. Then continue to proper net position.

Net Position

1. Be at the point bisecting the opponent's possible return.
2. If the opponent is successful in hitting a very low shot to your feet, don't attempt a winner, but play a defensive return and await the next volley.
3. Be prepared for the lob.
4. Generally, keep the volleys deep until you get a clear shot down the line or crosscourt that is put away.

Playing Against Opponent at Net

There are only three choices of shots depending upon position of the person at net and your own position. They are (1) a low dipping shot to her feet, (2) a winning passing shot and (3) a lob.

Strategy From Inside the Baseline

1. Hit a hard low down-the-line passing shot if a side opening occurs. *This is the best of all percentage shots.*
2. Hit a medium hard cross-court aiming for the short corner and crossing the net at its lowest point, the center.
3. Hit a low dipping shot crosscourt or down the line that makes the net girl hit up.
4. Get the ball to the net girl's feet, anticipate a weak return immediately and move up to catch a rising ball that can be driven downward as you also move up to the net.

Strategy From Back of Baseline

1. Hit a hard passing shot down the line or crosscourt if the pace of the play is fast and the net girl is on the move.
2. If the net girl has achieved a solid net position, lob high and deep.

Strategy From Very Deep

1. Hit extremely high lobs.

TENNIS TIP

Measuring the Tennis Net

The length of a tennis racket plus the width of a racket head equal the correct height of the net—three feet at the center of the net. Check the height of the net before playing. If it is too high or too low, the net may be adjusted by turning the handle of the reel on the net post.

A Word about Tennis Elbow

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There are a number of nagging discomforts that frequently plague the tennis player and subsequently the tennis coach or teacher. Bruises, sprains, strains and some form of tendonitis are among these. Although the conditions of these discomforts are often temporary and perhaps not serious enough to warrant complete cessation of play, they do furnish enough anxiety to the player to affect his concentration, and that, in the final analysis, assuredly may affect his performance.

Description

Among these nagging discomforts there is the much talked-about tennis elbow. Technically speaking, it is an inflamed condition usually around the lateral epicondyle of the humerous. Practically speaking, it is a persistent pain the elbow that is aggravated by almost every backhand stroke or an off-centered shot and a lot of other everyday tasks like opening a stubborn door or twisting a jar cap. Tennis elbow may strike the skilled player who takes his game seriously and plays several times a week to prove it.

From a technical point of view, the condition and resulting pain may be due to the tearing and pulling of fibers (ligaments and tendons) attached to the lateral epicondyle of the humerus. Any muscles having an extensor or supinator function are congregated along this lateral aspect of the elbow (anconeus, supinator and extensor carpal radialis longus) and subsequently their tendons become subject to the tearing and pulling. Repeated impact of ball on racket on a faulty backhand stroke puts the work responsibility on these extensor muscles. Thus the fibers may become frayed. This is not unlike a frayed string on a racket or a frayed rope. Repeated impact or stress even away from the area will cause more fraying and tearing. Continual impact on these muscle fibers will lead to more tearing and fraying and subsequently more pain, and the cycle is on.

From a practical point of view, the pain is likely caused by some poor tennis habits that warrant attention from the skilled player, the serious hacker and certainly the concerned coach/teacher. Failure to

keep the forward shoulder down, or to keep weight on the forward foot or a tendency to hit the ball too late may all contribute to the pain-producing situation.

Whether one chooses to describe and analyze the situation from a technical standpoint or from a practical standpoint, the fact remains that the player is suffering with a malady in the tennis arm which will make impossible that necessary total concentration. Following are some suggestions for pain relief that may at least help the player get through the summer or playing season.

Suggestions for Relief

First, the condition was described as an inflamation. So one step toward alleviation would be reduction of inflamation. Aspirin, or doctor prescribed anti-inflamatory medication, or ice could be easily administered. All are capable of reducing inflamation.

Then it was stated that the pain was centered around the muscles attached to the lateral epicondyle area. A work load on these muscles has been made by continued force. This force is transmitted finally to that painfully sore lateral epicondyle. A cushioned band or restrictor on the arm just below the elbow joint would give the anconeus and extensor carpi radialis longus and the supinator something to bounce on–thereby absorbing some of the shock destined for the epicondyle. These restrictors may be purchased commercially or they can be homemade. A narrow piece of foam rubber (long enough to wrap around the arm) glued to a strip of beltbacking with an inch or so of the self locking zippers on each end will serve quite well as a restrictor.

It was further noted that the condition could be aggravated by some bad habits in form and execution. A simple remedy (to better form) may be to change rackets. The lighter racket with a whip-action may cause the reasonably skilled player to develop some poor positioning habits, particularly in picking up garbage balls and making desperation (those-almost-too-late) shots that could have been made without desperation. A change to a heavier, less whippy racket may force a return to good form and fundamental positioning.

On the other hand, if the heavy racket with less whip action is causing the player to hit late, particularly on the backhand, then the use of the lighter racket (metal, for example) with more whip action may prevent this player from developing poor position with weight centered on the rear foot.

Thus, a change of racket could help relieve the elbow malaise. The coach/teacher would do well to observe carefully any individual player's tendency to hit late or shift erroneously to the rear foot in repeated execution of the backhand. There is no medical substitute for proper execution.

Some devotees of the tennis elbow cure-cult recommend stretching exercises (1, 2, 3). This makes sense, for if the tightness of muscles elsewhere in the body (the legs, the shoulders or wherever) is reflected in strained or distorted movements of the racket arm, then relief of the tightness or tautness in these other areas by stretching may help. Gentle, sustained stretching would be an appropriate start. The next step would be to move progressively to more vigorous and "exaggerated stretching" as suggested by Steiner (3). The tennis elbow sufferer would feel that the obvious place to start would be the arm-elbow area, but the player would do well to consider concerted stretching of the shoulder region as well as hip and leg areas. Stretching only the painful area would have little lasting effect, if, in fact, the tennis elbow condition is aggravated by tautness or tenseness in other areas.

Finally, the best recommendation for tennis elbow relief is one akin to the proverbial condition of "locking the barn door after the horse is already out." That recommendation is improved technique in stroking. There is no substitute in the form of aspirin, or ice, or restrictors, or rehabilitative exercises for proper execution. The player who executes an effective backhand (or any other stroke) with good form, proper positioning and precise timing is far less likely to develop a condition of tennis elbow or any of the other nagging injuries that will eventually affect his play.

Although the use of multiple remedies will be of little help in isolating the one most effective for a specific player, their use will, at least, buy time for the player in the peak of the season. That is the period when the player–skilled and competent or unskilled but faithful–is least disposed to give up time in order to effect healing.

Conclusion

A complete analysis of cause and effect of tennis elbow may lack identity to the tennis experts, but its condition lacks no identity to the sufferer. Time and inactivity may cause tennis elbow to go away. But that is not enough for the player who wants to keep playing. If the suggestions for relief do, in fact, give relief, the player may then finish the season in reasonably good health. If the suggestions for relief do not give relief, then the player may have to hang up his racket for awhile and await a medical diagnosis specific to him and to his very own elbow. Tennis elbow is, indeed, a nagging discomfort that will not necessarily go away if ignored.

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Coaching the Skilled Tennis Player in an Academic Environment

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Coaching the skilled player in a high school or college setting has unique problems and challenges. A good tennis team coach is concerned not only with developing a winning team but also with developing a fine person who enjoys playing tennis and participating in competition. Learning to compete and accept victory or defeat with poise and equanimity is a valuable part of the tennis team experience.

Developing good sportsmanship, appropriate court manners and an attractive personal appearance, as well as teaching winning tennis tactics and court strategy in match play are all important responsibilities of the tennis coach. The tennis team reflects the attitudes and ability of the coach to impart these qualities.

Often young players are competing in match play for the wrong reasons. The tennis coach is challenged to build an *esprit de corps* on her team; she must also know each player individually as a friend. The coach has a marvelous opportunity to help her students achieve academically, grow socially and emotionally and improve as tennis players. Counseling skills and willingness to be honestly interested in helping each player become all that she can become are important. Tennis team members have academic and tennis goals, and the skilled coach is interested in developing the whole student and a winning team of players who understand and appreciate the game.

Flexibility of team practice schedules to allow students to take the necessary academic courses for their major studies should be a prime consideration. This does not mean that team practice is not important, for it is. The tennis coach, however, must work cooperatively with the academic faculty so that the tennis team matches, trips and practice sessions are excellent experiences that

contribute to the player's total growth. Tennis team membership and match play should not cause academic failure.

The tennis coach is not just a traveling baby sitter. She has the opportunity to counsel each player in her personal, social and academic problems while at the same time assisting each team member in improving her tennis skills and competitive attitude. Sometimes the highly skilled tennis player is a spoiled prima donna type who expects to be catered to because of her tennis ability. The tennis coach must help this player learn to be a cooperative team member.

Only 1 of every 100 players on high school and college teams is ambitious enough to become a great tennis star. Only a small percentage of the tennis team members have the talent and motivation to become touring tennis professionals. When the tennis coach does have a player with this talent and ambition, it is the coach's responsibility to help her achieve this goal without sacrificing her academic commitments.

Selecting the tennis team must be done in an objective, fair manner. A series of round robin matches, where every player has an opportunity to compete against every other player is one valid method of arriving at the rank order of ability of each player. The number of team players will vary depending upon the school and the league play schedule. Often a junior varsity team can be developed in addition to the varsity team. This allows two levels of players to gain competitive match experience. To assure competent officials for the team matches, the coach can certify team members as umpires and linesmen. The junior varsity team can serve as umpires for the varsity team matches and vice versa.

An active challenge ladder for the competitive players is also a helpful method of selecting each week the number one, number two and number three places on the team.

Developing winning doubles team combinations is another challenge for the tennis coach. Often the number one player may play better doubles with the number 3 or 4 player than with the number 2 player. The tennis coach will soon discover which players will make the best doubles teams by trying out various combinations and arranging informal match play.

Serving as a tennis team coach is a challenging opportunity. Even if she does not play as well as some of her top team players, the tennis coach can successfully organize and develop an outstanding tennis program.

THINKING

If you think you are beaten, you are.
If you think you dare not, you don't.
If you'd like to win, but think you can't
It's almost a cinch you won't.
If you think you'll lose, you are lost.
For out in the world we find
Success begins with a fellow's will
And it's all in your state of mind.
If you think you are outclassed, you are.
You have got to think high, to rise.
You've got to be sure of yourself,
Before you can ever win a prize.
Life's battles don't always go
To the stronger or faster man.
But sooner or later, the man who wins,
Is the man who thinks he can.

Anonymous

What is Team Tennis?

ELLIE PEDEN

Ellie Peden graduated from the University of Illinois with a B.S. degree in physical education. She is coach of the Anoka Senior High School tennis team, Anoka, Minnesota, St. Catherine's College team, St. Paul, Minnesota, and a teaching professional at an indoor racket club. As a ranked tournament tennis player in the Northwestern Lawn Tennis Association, she has conducted several tennis clinics and workshops for physical education teachers.

By now, many of us are probably familiar with the team-tennis concept after one complete season of having viewed the professional World Team Tennis. For those not acquainted with the format put forth by WTT, the team play opens with a women's singles match, which consists of one six-game set. Should the set go to 6-6, the 9-point tie breaker is played. Men's singles follow the opening match, followed by women's doubles, men's doubles and finally mixed doubles. All matches are one set. Scoring is by games won by each team and is accumulative. In other words, if player "A" defeated player "B", 6-3, player "A" would receive six points for her team, while player "B" would score three points for her team. Men's and women's points are totaled together and often the team match will be decided by the last match, that of mixed doubles. This often makes for an exciting climax to an evening of team competition.

Team tennis is an outstanding possibility for exhibition and could be used by both high school and college teams for that purpose, but because of the one-set limitation, it may be deemed unsatisfactory for regular competition, where the traditional method of play for interscholastic matches is probably more acceptable. Team tennis also limits the number of participants. Yet, the scoring method for the team concept lends an interesting element to the game and does make for high spectator interest.

Provide More Opportunity for Game Play

DONNA GENOVA

Donna Genova received her B.A. degree from Queens College, Flushing, New York, and her M.S. degree from Indiana University, Bloomington. She is currently teaching at Bronx Community College, Bronx, New York. She has been teaching tennis on the collegiate level for five years.

The past 10 years have witnessed a tremendous interest in tennis by both spectators and participants. This increasing popularity has presented problems for many physical education teachers, recreation leaders and managers of public and private tennis courts in terms of the number of available courts for the rapidly increasing numbers of participants. Urban areas are particularly affected since there are not sufficient courts for the large number of people in these concentrated areas. Construction of new tennis courts to ease the present shortage will take a considerable period of time. In some instances, more courts may never be built because of such factors as lack of finances and space.

What alternatives can we offer that might lessen the severity of this problem? Perhaps, courts could be made more readily available if the time to complete a game, set or match were decreased. This would afford more people the opportunity to use the existing courts. Within the past few years, the United States Tennis Association has taken steps which have had an effect on the duration of matches. The development of the five of nine points (sudden-death) tie-breaker when a match reaches six games-all has forced the termination of sets which might have continued for considerably longer periods. (2) This system is being utilized at the USTA national and sectional competitions.

The Wimbledon 7 of 12 tie-breaker is a variation of the above system. (2) It also comes into effect when the game score is six-all. However, players may have to compete for a slightly longer period than in the USTA tie-breaker system before the winner of the set is determined since seven points rather than five points must be won.

However, these innovations are concerned with the total number of games per set. A minimum of 12 games must be played before either of these scoring systems goes into effect. Therefore, these systems may not aid those tennis instructors who, because of lack of class time to complete a set, are unable to give *all* the students in their classes more opportunity to play a few games of tennis.

A possible solution which instructors could use would involve limiting each student to the playing of three games. However, if two

players are evenly matched in skill ability, a game often takes considerable time to complete because of the many returns to deuce point. Another alternative is that of setting a time limit per student. However, instructors then face the problem of students being halted in the midst of a game which might be of crucial importance to the set.

If these solutions are unsatisfactory, the "No-Ad" scoring procedure can be utilized. As the name implies the advantage point has been eliminated from the scoring method. Now, in order to win a game, a player needs to score only four points. When the score is three points-all (deuce), the player who wins the next point, wins the game. It is not necessary to have a two-point advantage. On the seventh and deciding point of a game, the receiver has the option of choosing to which court the ball will be served. In the event that a set reaches six games-all, the nine point sudden death tie-breaker can be employed. (2)

Another innovation inherent in this system is that a simplified scoring terminology can be employed. The numbers zero, one, two, three (game point), Game, can be used rather than the conventional, and often confusing, scoring terminology. Beginning players are able to keep a more accurate account of the score of each game.

The No-Ad scoring system can be implemented for all levels of play. Elementary teachers will find this system advantageous since students can quickly grasp the scoring procedures. Junior and senior high school teachers, as well as college instructors, might utilize this system in class situations or intramural contests in order to give students more opportunities to participate in game situations.

Coaches who use several sets of the No-Ad system during practice situations will discover that their players are exposed to the pressure situations of "game point" more frequently than in the conventional scoring system. In many instances, lack of sufficient daylight causes coaches to limit the number of matches which are played when in competition with other schools. Perhaps the adoption of the No-Ad scoring procedure would enable more matches to be played.

Recreation leaders may find that less conditioned or handicapped persons are able to play additional sets of tennis, since games take a lesser amount of time and hence less physical stamina to complete. Tournament directors may find it easier to run more extensive tournaments since the time necessary to complete a match will be decreased. Therefore, larger numbers of competitors can be accommodated. The decreased amount of time necessary to complete a match may also appeal to spectators.

Ideally, everyone interested in tennis would like to have adequate facilities for all participants. However, until such situations become feasible, perhaps we should try to devise methods whereby more

people are given an opportunity to play a game. The No-Ad scoring procedure is an experimental system which may be utilized to meet our present problem of increased court time for all participants. Readers should consult the current *Tennis Yearbook* for official "No-Ad" rules.

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What About Net Positioning in Doubles?

DORIS KOSTRINSKY

Doris Kostrinsky received her Ed.B. degree from the State University of New York at Buffalo and her M.A. degree from the Ohio State University, Columbus. She is an assistant professor of physical education at Ithaca College in Ithaca, New York where she has taught both major and elective tennis classes of different skill abilities. She attended the Leighton-Barta National Tennis School for Teachers in 1964, and has participated in a number of tennis tournaments. While attending the SUNY at Buffalo, she represented the university at the Eastern Intercollegiate Tennis Championships at Forest Hills.

Those familiar with good doubles play know that it is a game of flexible positioning, requiring constant readjustment depending upon the position of the ball. The object is to take command of the net.

The concept of doubles positioning in regard to its flexibility can be understood *theoretically* by the beginner, but can hardly be demonstrated *practically*. This is a result of the beginner's lack of skill particularly in the technique of volleying. When the beginner is preoccupied with the execution of the skills of the game, there is hardly time to react to each situation.

Advanced Doubles Play

Partner of the Server. In advanced doubles play, the partner of the server should assume a net position six to eight feet away from the net and a few feet inside the alley line. This places the net player in a strong offensive position, allowing net coverage and also a retreat to the baseline to recover lobs. This usually forces the receiver to return service crosscourt away from the net player.

Partner of the Receiver. The partner of the receiver should be at the service line, in the center of the service box. From this position she must respond to her partner's return of serve by either retreating back to the baseline or by moving up to the net in position similar to that of the net player on the serving team. On an offensive return of serve, one which is low and crosscourt, the partner of the receiver should move toward the net. On a return of serve which appears to be defensive in nature, the partner will retreat back to the baseline. This system of starting positions has been referred to as the Australian System of doubles play. Ideally, in good doubles play, both players on a team will try to come to the net together when

they are on the offensive, or play back at the baseline when their team is put on the defensive.

Beginning Doubles

As described above, this system requires that the partner of the receiver quickly analyze the situation after the return of serve and decide whether to advance to the net or retreat back to the baseline. The author has found that trying to teach beginners this flexible positioning usually has one of two results–(1) the partner forgets to advance or retreat from the position in the middle of the court and winds up playing the point out from the weakest position on the court or (2) the partner always rushes towards the net regardless of the actual return of service, defeating the entire purpose of the starting position.

Conclusion

There will always be a few beginners who will grasp the purpose of this net position and be able to demonstrate it practically, but their number will be few. Therefore, the recommendation is that the beginner (the partner of the server or receiver) should assume only one net position. This position should be the one described earlier for the partner of the server in advanced doubles play.

In this way, the beginner will not add to her already uneasy feeling of playing the net by knowing she must analyze strategically, as well as execute correctly her newly acquired volleying skill. Once her volleying skill is fairly well established, then there is no reason why this more flexible net position cannot be introduced and reinforced through doubles play.

Playing Percentage Tennis

BERNICE J. GOLDSTEIN

Bernice J. Goldstein is a member of the United States Professional Tennis Association. She earned her B.A. degree from C. W. Post College and received her master's degree from New York University in 1972. She is currently teaching physical education at August Martin High School in Jamaica, New York.

Stroking

Percentage tennis requires one to use the stroke that is most likely to be a good and safe shot. It means making the shot that will remain in play by using the tennis court to your advantage. For example, hit the crosscourt instead of a down-the-line shot. A down-the-line shot must clear a net height of 3½ feet. On the other hand, the net height at the center is only 3 feet, so a crosscourt stroke is sent over the net at its lowest point. Playing crosscourt increases the chances of a successful shot.

To further reduce the risk of error do not aim for the lines. Instead aim for the "safe crosscourt zone." See Figure 1.

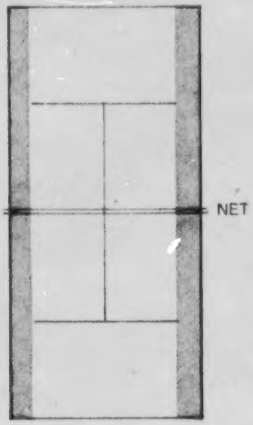

Figure 1. Singles court. Shaded area is three-foot safety zone.

Avoiding unforced errors is the key to percentage tennis. Restrain desires to hit the flashy winner, an all or nothing affair. Don't give in to the impulsive urge to hit a sharply angled short crosscourt shot. Go with the odds. Reduce the angle of the shot to increase the chances of making the shot.

Anticipate returns by quickly recovering from each shot. Recovery does not mean returning to the center of the court. It means returning to the center of the area of the most likely return. (See Figure 2).

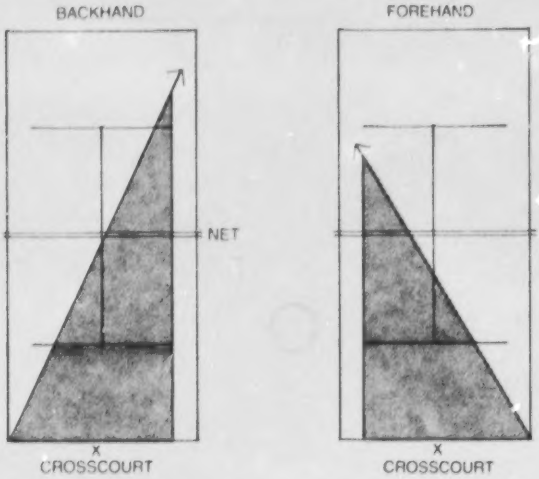

Figure 2. Shade indicates area of most likely return in crosscourt exchange. X represents player's position after recovery.

Does percentage tennis force a player to rely solely on the crosscourt theory? The answer is no. Down-the-line shots can be used to return short shots. Here too, resist the temptation to hit the sensational shot. Remember that having moved in to return the short ball, do not aim at the baseline. Do not try to blast the ball. Keep in mind the safety zone. This safety zone extends from three feet beyond the service line to three feet before the baseline. (See Figure 3.)

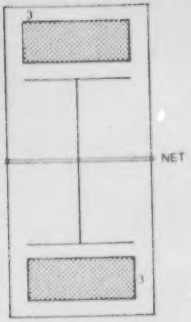

Figure 3. Shading represents high percentage depth shots in down-the-line situation.

Hitting the down-the-line shot in this manner allows the aggressor to penetrate the opposition's defenses and affords the opportunity to approach the net with the least possible risk.

In following the line of the ball up to the net, the offensive player will then be in a position to volley the ball into the open court. (See Figure 4.)

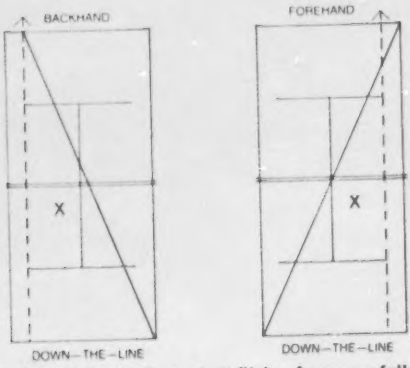

Figure 4. Dotted line indicates ball flight. Aggressor follows ball path and takes net position X at center of possible returns.

While at the net, the percentage player positions herself in the center of possible returns.

Serve and Return of Serve

How can percentage tennis be employed in the vital serve area? The server must be sure to place a high proportion of first serves in the service box. If the cannonball serve cannot be consistently placed in the box, then that serve becomes more a liability than an asset. As soon as the server is reduced to a second serve, the receiver can become offensive minded and move into position to hit her strongest stroke. A second serve eliminates the advantage the server once enjoyed.

If the server has a consistently strong forcing serve, how can the receiver return this shot while limiting the risk? A high percentage move is merely to block the shot back crosscourt. Early preparation, a shortened backswing and intense concentration on the ball throughout the server's service motion will enhance the receiver's return of serve.

The server may establish a pattern of charging the net. In this case, the receiver must attempt to keep the return closer to the net. The strategy is designed to force the server to hit a defensive shot. The receiver is trying to blunt the server's aggressive pattern of play.

Percentage tennis is winning tennis capitalizing on skills and abilities. It involves reducing unforced errors, improving court coverage and taking advantage of an opponents' miscues.

What Grips To Teach the Beginner?

DORIS KOSTRINSKY

A biographical sketch of the author appears on page 65.

There has yet to be any agreement concerning the proper tennis grips to teach the beginner. It is the author's intent to suggest those grips that will give the beginner good immediate success, but even more important, lay the foundation for building more skillfully executed strokes through constructive practice in the future.

Groundstrokes

There is more agreement on the grip for groundstrokes in tennis than for any other stroke, that is, the Eastern Forehand and Backhand. This grip enables the player to handle both low and high shots, and therefore is well suited for play on all court surfaces. If used, the Continental grip would be best suited for hitting low shots on a grass court because of its opened racket face at impact but would be ill-suited for high shots on clay courts. The reverse would be true for the Western grip.

Volley

When teaching the volley, the author advocates the Continental grip. Some instructors teach the volley using the Eastern forehand and backhand grips, switching depending upon the shot. Those who teach this grip may believe that the player will feel more confident with this grip at the net, because of his familiarity with it from the groundstrokes. Be this as it may, no research has supported the view that students will learn more quickly by using the Eastern grips than by using the Continental. Observations on the part of many of the more recent writers on tennis have noted that most of the top players do use the Continental grip, which eliminates the switching of grips for forehand and backhand. This is an important consideration in good tennis play when the net player may be bombarded by fast shots which allow little time for a grip change.

Service

The Continental grip is this writer's choice for the serve. This grip provides the server with the necessary wrist action which is so important for a successfully executed spin or speed serve. The Eastern forehand, which has been one of the more frequent choices for a service grip, is definitely a handicap in this respect. Many instructors start with this grip, but will later recommend that the grip be changed more toward a backhand position as the player becomes more proficient. The Continental, on the other hand, will

enable the student to start right at the beginning with a grip which will not handicap but allow the necessary wrist action needed for an accomplished service.

Another obvious advantage is that a player who uses the Continental grip for both service and net play should be able to learn more advanced techniques, such as rushing the net after service, with less difficulty since there is no need to worry about changing grips on the way to the net.

Overhead Smash

The overhead smash should be taught with the same grip as that used for serving, since the actual motion is almost identical to that of the serve. Also it would seem that the overhead should be easier to master with the player already using the Continental grip at the net position.

Conclusion

The Eastern grips should be taught for the groundstrokes, and the Continental grip for the volley, serve and the overhead smash. The beginner should learn techniques that will lay the foundation for an eventually skilled tennis game. In this way, the beginner will be distinguished from the advanced player not by the techniques employed but by the execution of these techniques.

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St. Paul, MN

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Beginning Tennis, 1964, 14 min. Producer: George B. Pearson, University of Alabama.

Association-Sterling Films, Inc. 866 Third Ave., New York, NY 10022.
Approach to Tennis, 14 min. color/b&w, rental $7.50. Spanish and French also.
Great Moments in the History of Tennis, 1968, 40 min., b&w, free loan film.
Tennis, Everybody's Game, 1973, 28 min. color, free.
Tennis Everyone with Butch Bucholz, 28 min., 16mm., sound, color, free loan film.

BFA Educational Media, Division of CBS, Inc., P.O. Box 1795, Santa Monica, CA 90406.
Tennis: Basic Tactics for Doubles, 13 min. 16mm., sound, color, sale $160, rent $10.
Tennis: Basic Tactics for Singles, 13 min. 16mm, sound, color, sale $160, rent $10.

Brentwood Productions, P.O. Box 49956, Los Angeles, CA 90049.
A Guide to Tennis, 22 min., 16mm, sound, color, sale $250, rent $20.

Champions on Film, 745 State Circle, Ann Arbor MI 48104.
Women's Tennis, 16mm, reel, super 8mm reels, and Kodak continuous cartridges, technicolor, sale $19.95 per. film, $18.35 for 3 or more. Seven films are available: forehand strokes, one-handed backhand, two-handed backhand, serve, volley and half-volley, lobs and smashes, footwork.

Coca-Cola Export Co., 515 Madison Ave., New York, NY 10022 or local dealer.
Tennis Everyone, 14 min. color, free.

Films Incorporated, 1144 Wilmette Ave., Wilmette, IL 60091.
The Groundstrokes with Billie Jean King, 15 min., 16mm, sound, color or b&w, rent $12-b&w, $17 color. (May rent from Indiana University.)
The Serve with Billie Jean King, 15 min., 16mm, sound, color or b&w, rent $12-b&w, $17 color. (May rent from Indiana University.)
Volley, Lob and Overhead with Billie Jean King, 15 min., 16mm, sound, color or b&w, rent $12-b&w, $17 color. (May rent from Indiana University.)

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Love Tennis, 30 min., color, U-Matic Video cassettes, ½" Hellical reel to reel open tape, $15 each. Series of 10 programs: 1) forehand, 2) backhand, 3) serve, 4) return of serve, 5) volley, 6) lob and smash 7) singles strategy, 8) doubles strategy, 9) jargon, scoring and answers, 10) interviews.

Note: For additional information consult the:

AAHPER – Washington for filmstrip: *Tennis Group Instruction, $11.50.*

USTA 1975 Tennis Film List. Send $1 to USTA Education and Research Center, 71 University Place, Princeton, NJ 08540.

TENNIS STUDY QUESTIONS

1976-1978

Revised by the Tennis Examinations and Ratings Committee

PART I

Directions: Indicate the umpire's decision in the following situations. There is only one best answer. A refers to the server and B refers to the receiver. Assume only those conditions which are stated.

SP – Server's point
RP – Receiver's point
F – Fault
L – Let
BCP – Ball continues in play

1. At the beginning of the game, the first ball served strikes the net strap and then Player B's arm.
2. Player B's partner is struck by the served ball.
3. In a doubles game, Player A returns the ball down the sideline so that it passes beneath the net cable but lands inside the doubles sidelines.
4. The second serve bounces in the proper service court and strikes Player B's shoulder. The ball lands inbounds on Player A's court.
5. Players A and D are playing B and C. Player D volleys the ball and in following through across the net strikes B's racket as a return is attempted. The ball lands in Player B's court.
6. Player A steps on a ball lying behind the baseline as she attempts her second serve. She swings and misses the ball.
7. Players A and D are competing against B and C. Player A is the first server for the team and assumes a position between the singles and doubles sidelines and behind the baseline. The first serve lands in the right service court.
8. On the first serve, Player A tosses the ball forward and steps across the baseline to catch it.
9. Player A returns a ball with a volley. The racket slips out of her hand and follows the ball into B's court.
10. Player B stands in the alley to receive the serve. The served ball lands in the correct court.
11. As Player A tosses a ball for the serve, a second ball slips from her hand. The served ball lands in the correct court and is returned by B.

12. A lobbed ball, clearly traveling past the baseline, is caught by Player A, who calls "out."
13. Player B returns the serve and the ball hits the net post before bouncing into A's court.
14. The served ball strikes B on the foot before touching the ground.
15. Player B volleys the ball from outside the sideline.

PART II

Directions: Read the questions carefully. Select the one item which best answers the question.

16. The decision to utilize tie-break procedures during a tournament rests with which individual(s)?
    A. The players
    B. The referee
    C. The umpire
    D. The tournament committee
17. For which of the following is the umpire solely responsible?
    A. Makes decision about when new balls are required
    B. Postpones the match because of darkness or bad weather
    C. Removes a linesman
    D. Signs the scorecard at the end of the match
18. When may a doubles team alter its receiving order?
    A. When the teams exchange ends of the court
    B. At the beginning of the new game
    C. At the beginning of the set
    D. At no time during the match
19. It is the responsibility of the umpire to do which of the following?
    A. Allow the players a maximum of five minutes for warm-up.
    B. Call the name of each player at the beginning of each game.
    C. Call a fault when a serve falls into the net.
    D. Repeat all the calls of the linesmen.
20. Which of the following officials is ultimately responsible for deciding whether a ball lands out-of-bounds?
    A. Referee
    B. Umpire
    C. Linesman
    D. Any of the above
21. With a game score of 30-love, the server commits a fault while serving to the left service court, then the error in the service court is discovered. What is the umpire's decision?
    A. 30-love, the next serve will be delivered to the right service court.

B. 30-love, the next serve will be delivered to the left service court.
C. 30-15, the next point will be delivered to the right service court.
D. 30-15, the next point will be delivered to the left service court.

22. Which of the following is *not true* concerning doubles play?
A. The serving order may be altered at the beginning of a set.
B. The receiving order may be altered at the beginning of the set.
C. Partners shall receive service in the right-hand court alternately for their team.
D. The first server for the team may also be the receiver in the lift-hand court.

23. When does the umpire call "not up"?
A. When the wrong server of a doubles team prepares to serve
B. When a player fails to reach the ball on the first bounce
C. When a player fails to resume play quickly
D. All of the above

24. Player A served first at the beginning of the set. The score is tied at 6-all. A 5-out-of-9 tie-breaker procedure will be used to determine the winner of the set. Which of the following is true?
A. Player B will serve the first point in the tie-breaker.
B. Players exchange courts after each point.
C. If the game goes to 9 points, Player B will elect the court from which she wishes to receive.
D. Players shall exchange courts at the completion of the tie-break game.

25. Player A repeatedly bounces a ball before each serve. Player B is clearly annoyed. What is the umpire's decision?
A. Direct Player A to serve without the preliminary bounces.
B. Declare that Player A has defaulted the match.
C. Consult the referee who will make the final decision.
D. Any of the above

26. Which of the following is true of the VASSS single point scoring system?
A. Players serve four consecutive points before the serve changes.
B. Players change courts after every odd "hand."
C. Players change courts at the end of the set.
D. All of the above are true.

27. Players A and D are competing against B and C. Player A is the first server for the team. With a set socre of 1-3 and a game score of 30-0, it is discovered that D is serving out of order. What is the correct decision?

A. Set score 1-3; Player A serves from the right court.
B. Set score 1-3, 30-0; Player A serves from the right court.
C. Set score 1-3, 30-0; Player B serves from the right court.
D. Set score 1-3, 30-15; Player B serves from the left court.

28. Which of the following is true of official court measurements?
A. The net posts in doubles should be 3 feet outside the doubles court.
B. The net shall be 3½ feet high throughout its length.
C. The service lines shall be parallel to and 18 feet from the net.
D. The center mark shall be drawn outside the court and at right angles to the baseline.

29. The score is love-30. What does the umpire call when the server reaches across the net to hit a volley?
A. "Error love-40."
B. "Fault – love-40."
C. "Foul stroke – love-40."
D. "Stroke – 15-40."

30. Which of the following *is not* a foot fault?
A. The server shifts her foot across an imaginary extension of the center mark before she hits the ball.
B. The server steps on the baseline immediately after she hits the ball.
C. The server makes a poor toss and must take serveral steps to hit the ball. She stays behind the correct half of the baseline.
D. The server steps on the baseline just as she hits the ball.

EXAMINATION INQUIRIES

Inquiries concerning these study questions or theoretical examination questions should be directed to:

ALICE WORKINGER
222 Cooke Hall
University of Minnesota
Minneapolis, MN 55455

ANSWERS AND RULE REFERENCES

PART I

Answer	*Rule References*
1. L	13a
2. F	37
3. BCP	22, note
4. SP	18g
5. L	19,23
6. RP	9
7. BCP	32
8. F	7
9. RP	18e
10. BCP	4, Case 2
11. L	6, Case 2
12. RP	18g
13. BCP	22a, Case 1
14. SP	16a
15. BCP	15, 18c

PART II

16. D	Tie break
17. D	P&T of 0, Dut. Umpire
18. C	34
19. D	P&T of 0, Call Match #4,6,7,8
20. C	P&T of 0, Dut. Line, 14,
21. A	8a
22. C	33, 34
23. B	P&T of 0, Call Match #21
24. C	Tie break
25. A	30, explanation
26. B	VASSS single point
27. B	35
28. A	1
29. C	P&T of 0, Call Match #12
30. B	7a, 7b

Techniques of Officiating Tennis*

Revised by the PRINCIPLES AND TECHNIQUES OF OFFICIATING COMMITTEE

Note: Sections which have been reworded or clarified are designated by a check (✓). Changes in techniques have been indicated by shading.

DUTIES OF THE REFEREE

In the case of each tournament, the tournament committee elects the referee.

The referee shall –

1. Know and apply all the rules, being able to decide quickly and to take full responsibility for actions.
2. Have the power to appoint a substitute and may not umpire a match unless a substitute referee has been appointed.
3. Have the power to appoint and remove umpires, net umpires and linesmen, to assign courts and to start matches.
4. Decide any point of law which an umpire may be unable to decide, or which may be referred to the referee on appeal from the decision of an umpire. Such a decision is final unless reversed by the USTA Executive Committee.
5. Have the sole power to excuse a competitor from playing for a definite period.
6. Default a competitor who has not been excused and refuses to play when called upon to do so.
7. ✓ Postpone the match because of darkness or conditions of the ground or weather.
8. Give approval to postponement of a match by the umpire or order immediate continuation of the match.
9. Decide if an unfinished match is to be entirely replayed if the contestants are so agreed. (Rule 29)
10. Be present or arrange for a substitute during all play.
11. Sit beside the court alongside the umpire's chair during play of the finals and other important matches.
12. Give approval to the umpire's decision that new balls are necessary.

*Combination and digest of "(USTA) Tournament Regulations" and "Instructions for Tournament Officials" reprinted by permission from the *Umpires' Manual*, published by U.S. Tennis Association, 51 E. 42nd St., New York, NY 10017.

DUTIES OF THE UMPIRE

The umpire shall–

1. Have an exact knowledge of the Playing Rules, Tournament Regulations, and their proper enforcement and be responsible for the proper conduct of the match.
2. Be on hand and ready when the match is called.
3. Concentrate on the match and follow it keenly.
4. Be sure the court is correct, measure the net at the center and at the posts, and adjust the net during play if necessary.
5. Check that there is a full complement of chairs for linesmen placed opposite the various lines and not facing the sun (see diagram).

Note: Umpire's chair should be centered on the net about 5 feet from it with the seat not less than 5 feet from ground (preferably 7 feet).

6. Arrange for toss for choice of court and service.
7. Score the match and record points on a scorecard.
8. Call the score promptly and distinctly.
9. Direct the players to change courts in accordance with Rule 26 and 30b allowing them no rest or delay during the tiebreak changeover.
10. Watch for and call any infraction of rules and stay with a decision when felt correct.

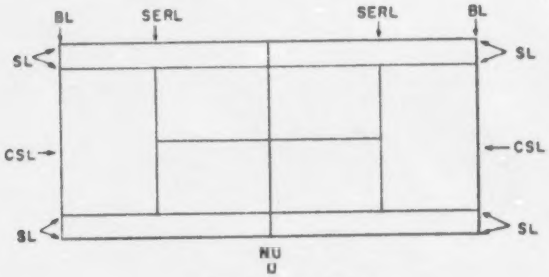


Diagram of Officials

BL—Base Linesman
SERL—Service Linesman
SL—Side Linesman
CSL—Center Service Linesman
U—Umpire seated on elevated stand
NU—Net Umpire seated by net post

11. Ensure that players serve from the proper court.
12. Ensure that players receive from the proper court.

13. Call service faults, lets, outs and foot faults only if there are no linesmen or net umpire.
14. Call a let and replay the point in accordance with Rule 23.
15. If appealed to by a player during a rally, say nothing.
16. Decide all doubtful or disputed strokes subject to decision of the linesmen, and all points of law subject to an appeal to the referee.
17. Decide when new balls are required, subject to approval of referee.
18. Uphold the decisions of linesmen and net umpire.
19. Order a point replayed when a linesman or net umpire corrects a decision if the call has affected the play of either side.
20. Decide, at times when a linesman or net umpire is unable to render a decision, or call a let and replay the point.
21. Announce the 10-minute intermission, noting time and name of player next to serve, and notify players three minutes before time is up. See that play is promptly resumed with all officials in place.
22. Suspend play due to circumstances not within the control of the players.
23. Postpone the match because of darkness or conditions of ground or weather, subject to approval of the referee.
24. Remove a linesman or net umpire for just cause, subject to final decision of the referee.
25. Do not let the gallery disturb the players. If it does, stop play and ask for cooperation of the spectators.
26. Sign the scorecard and deliver it to the proper authorities at the end of the match.

CALLING THE MATCH

General Suggestions

1. Have a scorecard, two soft pencils with erasers, and a copy of the current *NAGWS Tennis-Badminton-Squash Guide.*
2. Write the names of the competitors on the scorecard and be sure of their correct pronunciation.
3. Be able to project your voice so it can be heard easily by the gallery.
4. Allow the players warm-up time to be specific to the tournament being played.
5. After the warm-up, announce: "This match is between Miss Jones and Miss Smith. Miss Jones serving. Linesmen ready? Play."
6. Call the name of each player as the ball is served for the first time.

7. The umpire repeats all calls of linesmen and the net umpire.
8. When the service falls into the net on the first serve, do not call a fault.
9. Act as the connecting link between the match and gallery; keep your eyes on the ball in play and concentrate attention on the correct calling of score and conduct of the match.
10. After a point is finished, first mark the scorecard and then raise your head and announce the score loudly and distinctly. Make announcements sharp and clear with a brief pause after each syllable.
11. Hold the scorecard with the thumb of your left hand touching the line of the game being played.
12. Call the server's score first.
13. Call advantage by saying, "Advantage, Miss Smith."
14. Call games as follows: "Game, Miss Smith; games are four to two, Miss Jones leads, first set."
15. Call set as follows: "Game and second set, Miss Smith, seven-five; sets are one-all."
16. After the first set, announce the set score every three or four games.
17. In making announcements, the words to be emphasized are the names and the score.
18. At the finish of a match, announce: "Game set, and match—Miss Smith; score 3-6, 12-10, 6-3." Always give the winner's score first.
19. Correct the score whenever you have called it incorrectly. Call "Correction; the score is 15-all."
20. Wait until the applause subsides before calling the score.
21. Call "not up" if a player fails to reach ball on first bounce. Call this immediately to prevent confusion rather than waiting to see whether or not the ball is returned.
22. Call "foul stroke" or "stroke" when a player loses the point by playing improperly, such as touching the net with the body or with anything worn or carried, or if the ball is volleyed before it has passed the net.
23. Call all lets if there is not a net umpire—both on services and on situations where the point is to be replayed, according to the rules. In calling a service let, say: "Let, first service" or "let, second service."
24. If there is not a full complement of linesmen, call faults and outs on lines you have agreed before the match to judge.

Note: The further sidelines and two baselines are hardest for an umpire to judge, so when possible, linesmen should be assigned to these lines. The service lines are the next most difficult to judge. If

there are no linesmen, players may agree to judge further sidelines and baselines in their own court.

25. If there are no base linesmen, call foot faults which may be judged from the chair.
26. Never announce "match point" or "set point."

Players Change Sides After 1st game, 3rd game, etc.				Players' Initials	
C B		Servers Initials	Points-Set No. 1	A.B.	C.D.
				Games	
	1	A.B.		1	0
	2	C.D.		1	1
	3	A.B.		2	1

The scoreboard shows that in the first game the score ran and would have been called thus: "15-love, 30-love, 30-15, 40-15, 40-30, game (A.B.)." In the second game: "love-15, 15-all, 15-30, 30-all, 4-30, deuce, advantage (C.D.), deuce," and so on. The score of the server should be called first.

TECHNIQUE OF SCORING

1. Record names of players in the proper space on the scorecard.
2. After the order of service is determined, initial the spaces alternately on the scoreboard for the entire set. In case of a long deuce game in which there are not enough squares in which to record the score, it is advisable to go into the next page on the right or on the back of the card, but never down the card where the next games goes.
3. Put players' initials at the top of the extreme right-hand column.
4. Points are recorded by means of pencil marks in the spaces beneath the word Points, putting the server's points on the top line and the receiver's on the second line, as illustrated in the scorecard.

DUTIES OF LINESMEN

A linesman is appointed by the referee and may be removed only by the referee.

The linesman shall –

1. Be on hand and ready when the match is called.
2. Not wear white or light clothes.
3. Be seated facing the line designated to watch and be alert and concentrate every instant the ball is in play.
4. Sit quietly during play and not leave without the permission of the umpire or until replaced by another linesman.
5. Try to get out of the player's way to avoid interfering with a stroke.
6. Watch the line, not the ball. Sense where the ball will bounce and, if necessary, change position to see it.
7. Remember that "a ball falling on a line is regarded as falling in the court bounded by the line" (Rule 20).
8. *Call decisions loudly*, sharply and with conviction. If applause will drown out the call, *accompany the call with a motion of an arm* in the direction that the ball lands out of the court.
9. Call decisions as quickly as is consistent with accuracy.
10. Never call "out" until the ball has actually struck the ground or fixture outside the court.
11. Call only "out" or "fault," never "good."
12. Change a decision when it is realized an error has been made. The umpire must be told immediately and the umpire decides whether the point shall be replayed.
13. Call it to the attention of the umpire if a score is at variance with the linesman's decision.
14. Make a decision as the ball is seen and stick to it. The players, umpire and referee may never overrule the decision of a linesman on a question of fact.
15. Put hands over eyes if the player obstructs the view of the ball of line. The umpire makes the decision, asks another linesman or orders the point replayed.

The center service linesman shall –

1. Judge whether the server is standing on the proper side of the center service mark. If the server errs, call a foot fault.
2. Call a fault if the serve lands on the wrong side of center service line.

The service linesman shall –

1. Call a fault if the serve lands behind the service line.

The side linesman shall –

1. Judge whether the server is standing on the proper side of the sideline. If the server errs, call a foot fault.
2. Stand up when the service being watched is to the court.
3. Call a fault if the serve lands outside the single sideline.

The base linesman as foot fault judge shall –

1. Thoroughly understand the foot fault rule.

2. Call a foot fault only when positive the rule has been broken.

The net umpire shall –

1. Sit near the net post and call: (a) lets on service, and (b) balls that go through the net, the call being "fault" or "through."
2. Place fingers lightly on the net cord during the service to detect service lets which may not be seen easily.
3. Keep a duplicate score of the match.
4. Call "not ups" when requested by the umpire.
5. Note when balls are to be changed and see that the balls are changed at the proper time.

INTERPRETATIONS

Questions concerning officiating techniques in tennis should be directed to:

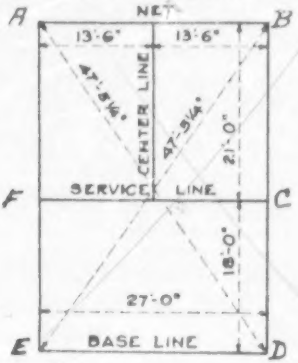
ANN VALENTINE
Brigham Young University
Provo, UT 84601

How to Lay Out a Tennis Court*

Most accurate results are obtained if a tennis court is laid out by a civil engineer or competent surveyor using proper surveying instruments. However, if such services are not readily available, adequate accuracy can be obtained with the proper use of two good 50 foot tapes as indicated below.

All courts should be laid out for singles and doubles play. However, since the same lines—except for the side line extensions for doubles play—are required for each it is best to first lay out the singles court, establishing the lines shown in the diagram on this page. (Note that this sketch shows only one half of such a court, the other half is exactly the same.) Courts should be laid out with the long way north and south. First establish the net or center line. This is done by driving a peg at Point A, then a second peg—27 feet from A—at point B. (See sketch). Then take the two fifty-foot tapes and attach their respective ends to the pegs A and B. On the first which will determine the side line A-E, measure off 39 feet and on the second, which will determine the diagonal B-E, measure off 47 feet 5¼ inches; pull taut in such directions that at these distances they meet at point E. Drive a peg at E. Then establish point D in a similar manner. (Note that the distance from E to D should be 27 feet—the same as from A to B.)

Check this for accuracy before driving peg at D. Point F (21 feet from A) and point C (21 feet from B) should then be established and pegs driven at these points. This is the lower (or south) one half of the court. The upper (or north) one half is determined in a similar manner. This completes the boundaries for the singles court. The doubles court boundaries are established by prolonging the base lines (from points E & D on lower half and similarly for the upper half.) 4 feet 6 inches in each direction and join-



*This article, the Rules of Lawn Tennis and Cases and Decisions (pages 92 - 113), and the USTA Tournament Regulations (pages 114 - 138) are reprinted with the permission of the USTA.

ing the four new points to establish the side lines for the doubles court. (Note that the doubles court is actually 9 feet wider than the singles court with side lines parallel to those on the singles court.)

See diagram accompanying Rule 1 for sketch of doubles court, with location of net posts indicated (3 feet outside doubles side line) and other details given. For championship play, the space behind the base line—i.e. between the base line and fence (or wire netting)—should be not less than 21 feet and the space between the sidelines and the fence not less than 12 feet.

An 80-page booklet, "Tennis Court Manual" on construction, maintenance and equipment can be obtained for $5.00 from H. O. Zimman, Inc., Publishers, 156 Broad St., Lynn, Mass. or the USLTA, 51 E. 42nd St., New York, N.Y. 10017.

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RULES OF LAWN TENNIS
and
CASES AND DECISIONS

EXPLANATORY NOTE

The appended Code of Rules, and Cases and Decisions is the Official Code of the International Lawn Tennis Federation, of which the United States Tennis Association is a member.

Italicized EXPLANATIONS, EXAMPLES and COMMENTS have been prepared by the USTA Umpires Committee to amplify and facilitate interpretation of the formal code.

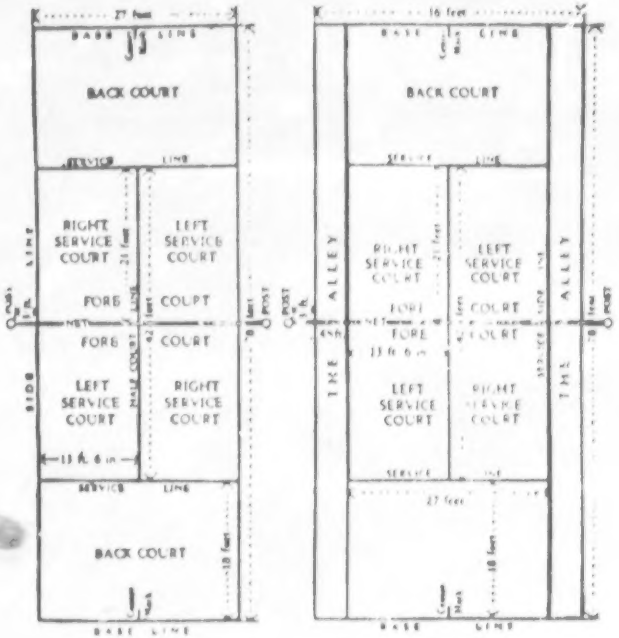
THE SINGLES GAME

RULE 1

Dimensions and Equipment

The Court shall be a rectangle, 78 feet long and 27 feet wide. It shall be divided across the middle by a net, suspended from a cord or metal cable of a maximum diameter of one-third of an inch, the ends of which shall be attached to, or pass over, the tops of two posts, 3 feet 6 inches high, the center of which shall be 3 feet outside the Court on each side. The height of the net shall be 3 feet at the center, where it shall be held down taut by a strap not more than 2 inches wide. There shall be a band covering the cord or metal cable and the top of the net not less than 2 inches nor more than 2½ inches in depth on each side. The lines bounding the ends and sides of the Court shall respectively be called the Baselines and the Side-lines. On each side of the net, at a distance of 21 feet from it and parallel with it, shall be drawn the Service-lines. The space on each side of the net between the service-line and the side-lines shall be divided into two equal parts called the service-courts by the center service-line, which must be 2 inches in width, drawn half-way between, and parallel with, the side-lines. Each base-line shall be bisected by an imaginary continuation of the center service-line to a line 4 inches in length and 2 inches in width called the center mark drawn inside the Court, at right angles to and in contact with such base-lines. All other lines shall not be less than 1 inch nor more than 2 inches in width, except the base-line, which may be 4 inches in width, and all measurements shall be made to the outside of the lines.

DIAGRAM AND DIMENSIONS OF TENNIS COURT



Singles Court *Doubles Court*

Note.—In the case of the International Lawn Tennis Championship (Davis Cup) or other Official Championships of the International Federation, there shall be a space behind each base-line of not less than 21 feet and at the sides of not less than 12 feet.

EXPLANATION OF RULE 1

The center of the posts in doubles should be 3 feet outside the doubles court.

The net should be 33 feet in the clear for a singles court, and 42 feet wide for a doubles court. It should touch the ground along its entire length and come flush to the posts at all points.

It is important to have a stick 3 feet, 6 inches long, with a notch cut in at the 3-foot mark for the purpose of measuring the height of the net at the posts and in the center. These measurements, as well as the measurements of the court itself, always should be made before starting to play an important match.

RULE 2

Permanent Fixtures

The permanent fixtures of the Court shall include not only the net, posts, cord or metal cable, strap and band, but also, where there are any such, the back and side stops, the stands, fixed or movable seats and chairs around the Court, and their occupants, all other fixtures around and above the Court, and the Umpire, Net-cord Judge, Foot-fault Judge, Linesman and Ball Boys when in their respective places.

RULE 3

Ball—Size, Weight and Bound

The ball shall have a uniform outer surface and shall be white or yellow in color. If there are any seams they shall be stitchless. The ball shall be more than two and a half inches and less than two and five-eighths inches in diameter, and more than two ounces and less than two and one-sixteenth ounces in weight. The ball shall have a bound of more than 53 inches and less than 58 inches when dropped 100 inches upon a concrete base. The ball shall have a forward deformation of more than .230 of an inch and less than .290 of an inch and a return deformation of more than .355 of an inch and less than .425 of an inch at 18 lb. load. The two deformation figures shall be the averages of three individual readings along three axes of the ball and no two individual readings shall differ by more than .030 of an inch in each case. All tests for bound, size and deformation shall be made in accordance with the Regulations in the Appendix hereto.

Note. At the Annual General Meeting of the I.L.T.F. held on 12th July, 1967, it was agreed that for the time being non-pressurized balls and low-pressure balls may not be used in the International Tennis Championship (Davis Cup), unless mutually agreed by the two nations taking part in any particular event.

NOTE

"How often may the player have new balls?"
Generally the ball-change pattern is specified by the Referee before the match is started. According to Tournament Regulation 14 (g) the Umpire, subject to the approval of the Referee, may decide when new balls are required to insure fairness of playing conditions. In matches where there is no Umpire, the players should agree beforehand on this matter.

RULE 4

Server and Receiver

The Players shall stand on opposite sides of the net; the player who first delivers the ball shall be called the Server, and the other the Receiver.

Case 1. Does a player, attempting a stroke, lose the point if he crosses an imaginary line in the extension of the net, (a) before striking the ball (b) after striking the ball?

Decision. He does not lose the point in either case by crossing the imaginary line provided he does not enter the lines bounding his opponent's court. (Rule 18 (e.) In regard to hindrance, his opponent may ask for the decision of the umpire under Rules 19 and 23.

Case 2. The Server claims that the Receiver must stand within the lines bounding his court. Is this necessary?

Decision: No. The Receiver may stand wherever he pleases on his own side of the net.

RULE 5

Choice of Ends and Service

The choice of ends and the right to be Server or Receiver in the first game shall be decided by toss. The player winning the toss may choose, or require his opponent to choose:

(a) The right to be Server or Receiver, in which case the other player shall choose the end; or
(b) The end, in which case the other player shall choose the right to be Server or Receiver.

RULE 6

Delivery of Service

The service shall be delivered in the following manner. Immediately before commencing to serve, the Server shall stand with both

feet at rest behind (i.e. farther from the net than) the base-line, and within the imaginary continuations of the center-mark and side-line. The Server shall then project the ball by hand into the air in any direction and before it hits the ground strike it with his racket, and the delivery shall be deemed to have been completed at the moment of the impact of the racket and the ball. A player with the use of only one arm may utilize his racket for the projection.

Case 1. May the Server in a singles game take his stand behind the portion of the base-line between the sidelines of the singles court and the doubles court?

Decision. No.

Case 2. If a player, when serving, throws up two or more balls instead of one, does he lose that service?

Decision. No. A let should be called, but if the umpire regards the action as deliberate he may take action under Rule 19.

Case 3. May a player serve underhand?

Decision. Yes. There is no restriction regarding the kind of service which may be used; that is, the player may use an underhand or overhand service at his discretion.

RULE 7

Foot Fault

The Server shall throughout the delivery of the service:

(a) Not change his position by walking or running.

(b) Not touch, with either foot, any area other than that behind the base-line within the imaginary extension of the center-mark and side-line.

Note.–The following interpretation of Rule 7 was approved by the International Federation on 9th July 1958:–

(a) The Server shall not, by slight movements of the feet which do not materially affect the location originally taken up by him, be deemed "to change his position by walking or running."

(b) The word "foot" means the extremity of the leg below the ankle.

COMMENT: This rule covers the most decisive stroke in the game, and there is no justification for its not being obeyed by players and enforced by officials. No tournament chairman has the right to request or attempt to instruct linesmen and/or umpires to disregard violations of it.

RULE 8

From Alternate Courts

(a) In delivering the service, the Server shall stand alternately behind the right and left Courts, beginning from the right in every game. If service from a wrong half of the Court occurs and is undetected, all play resulting from such wrong service or services shall stand, but the inaccuracy of the station shall be corrected immediately it is discovered.

(b) The ball served shall pass over the net and hit the ground within the Service Court which is diagonally opposite, or upon any line bounding such Court, before the Receiver returns it.

COMMENT: The Receiver is now allowed to volley a served ball; i.e., he must allow it to strike in his court first. (See Rule 16(a)).

EXPLANATION: In matches played without umpire or linesmen, it is customary for the Receiver to determine whether the service is good or a fault; indeed, each player makes the calls for all balls hit to his side of the net. (In doubles, the Receiver's partner makes the calls with respect to the service line.)

RULE 9

Faults

The Service is a fault:

(a) If the Server commit any breach of Rules 6, 7 or 8;

(b) If he miss the ball in attempting to strike it;

(c) If the ball served touch a permanent fixture (other than the net, strap or band) before it hits the ground.

Case 1. After throwing a ball up preparatory to serving, the Server decides not to strike at it and catches it instead. Is it a fault?

Decision. No.

Case 2. In serving in a singles game played on a doubles court with doubles and singles net posts, the ball hits a singles post and then hits the ground within the lines of the correct service court. Is this a fault or a let?

Decision. In serving it is a fault, because the singles post, the doubles post, and that portion of the net, strap or band between them are permanent fixtures. (Rules 2 and 9, and note to Rule 22.)

EXPLANATION: The significant point governing Case 2 is that the part of the net and band "outside" the singles sticks is not part of the net over which this singles match is being played. Thus such a serve is a fault under the provisions of article (c) above . . . By the same token, this would be a fault also if it were a singles game played with permanent posts in the singles position. (See Case 1 under Rule 22 for difference between "service" and "good return" with respect to a ball's hitting a net post.)

COMMENT: In doubles, if the Server's delivery hits his partner, the serve is a fault (not necessarily loss of point). See Rule 37.

RULE 10

Service After a Fault

After a fault (if it be the first fault) the Server shall serve again from behind the same half of the Court from which he served that fault, unless the service was from the wrong half, when, in accordance with Rule 8, the Server shall be entitled to one service only from behind the other half. A fault may not be claimed after the next service has been delivered.

Case 1. A player serves from a wrong court. He loses the point and then claims it was a fault because of his wrong station.

Decision. The point stands as played and the next service should be from the correct station according to the score.

Case 2. The point score being 15 all, the Server, by mistake, serves from the left-hand court. He wins the point. He then serves again from the right-hand court, delivering a fault. The mistake in station is then discovered. Is he entitled to the previous point? From which court should be next serve?

Decision. The previous point stands. The next service should be from the left-hand court, the score being 30/15, and the Server has served one fault.

RULE 11

Receiver Must Be Ready

The Server shall not serve until the Receiver is ready. If the latter attempt to return the service, he shall be deemed ready. If, however, the Receiver signify that he is not ready, he may not claim a fault because the ball does not hit the ground within the limits fixed for the service.

EXPLANATION OF RULE 11

The Server must wait until the Receiver is ready for the second service as well as the first, and if the Receiver claims to be not ready and does not make any effort to return a service, the Server may not claim the point, even though the service was good.

RULE 12

A Let

In all cases where a let has to be called under the rules, or to provide for an interruption to play, it shall have the following interpretations:

(a) When called solely in respect of a service, that one service only shall be replayed.

(b) When called under any other circumstance, the point shall be replayed.

Case 1. A service is interrupted by some cause outside those defined in Rule 13. Should the service only be re-played?

Decision. No, the whole point must be replayed.

EXPLANATION: The phrase "in respect of a service" in (a) means a let because a served ball has touched the net before landing in the proper court, OR because the Receiver was not ready . . . Case 1 refers to a second serve, and the decision means that if the interruption occurs during delivery of the second service, the Server gets two serves.

EXAMPLE: On a second service a Linesman calls "fault" and immediately corrects it (the Receiver meanwhile having let the ball go by). The Server is entitled to two serves, on this ground: The corrected call means that the Server had put the ball into play with a good service, and once the ball is in play and a let is called, the point must be replayed . . . Note, however, that if the serve were an unmistakable ace – that is, the Umpire was sure the erroneous call had no part in the Receiver's inability to play the ball – the point should be declared for the Server.

Case 2. If a ball in play becomes broken, should a let be called?

Decision. Yes.

NOTE: The USTA Umpires Committee has authorized this interpretation. A ball shall be regarded as having become "broken" if, in the opinion of the Umpire, it is found to have lost compression to the point of being unfit for further play, or unfit for any reason, and there is any likelihood that this deficiency had an effect on the preceding point.

RULE 13

The service is a let

The service is a let:

(a) If the ball served touch the net, strap or band, and is otherwise good, or, after touching the net, strap or band, touch the Receiver or anything which he wears or carries before hitting the ground.

(b) If a service or a fault be delivered when the Receiver is not ready (see Rule 11).

COMMENT: A "let" called for the reason the Receiver had indicated he is not ready, if called on second service, does not annul a fault on first serve.

RULE 14

When Receiver Becomes Server

At the end of the first game the Receiver shall become the Server, and the Server Receiver; and so on alternately in all the subsequent games of a match. If a player serve out of turn, the player who ought to have served shall serve as soon as the mistake is discovered, but all points scored before such discovery shall be reckoned. If a game shall have been completed before such discovery, the order of service remains as altered. A fault served before such discovery shall not be reckoned.

RULE 15

Ball in Play Till Point Decided

A ball is in play from the moment at which it is delivered in service. Unless a fault or a let be called, it remains in play until the point is decided.

COMMENT: A point is not "decided" simply when, or because, a good shot has clearly passed a player, nor when an apparently bad shot passes over a baseline or sideline. An outgoing ball is still definitely "in play" until it actually strikes the ground, backstop or other fixture. The same applies to a good ball, bounding after it has landed in the proper court. A ball that becomes imbedded in the net is out of play.

Case 1. A ball is played into the net; the player on the other side, thinking that the ball is coming over, strikes at it and hits the net. Who loses the point?

Decision. If the player touched the net while the ball was still in play, he loses the point.

RULE 16

Server Wins Point

The Server wins the point:

(a) If the ball served, not being a let under Rule 13, touch the Receiver or anything which he wears or carries, before it hits the ground;

(b) If the receiver otherwise loses the point as provided by Rule 18.

RULE 17

Receiver Wins Point

The Receiver wins the point:

(a) If the Server serve two consecutive faults;

(b) If the Server otherwise lose the point as provided by Rule 18.

RULE 18

Player Loses Point

A player loses the point if:

(a) He fail, before the ball in play has hit the ground twice consecutively, to return it directly over the net (except as provided in Rule 22(a) or (c)); or

(b) He return the ball in play so that it hits ground, a permanent fixture, or other object, outside any of the lines which bound his opponent's Court (except as provided in Rule 22 (a) and (c)); or

(c) He volley the ball and fail to make a good return even when standing outside the Court; or

(d) He touch or strike the ball in play with his racket more than once in making a stroke; or

(e) He or his racket (in his hand or otherwise) or anything which he wears or carries touch the net, posts, cord or metal cable, strap or band, or the ground within his opponent's Court at any time while the ball is in play; or

(f) He volley the ball before it has passed the net; or

(g) The ball in play touch him or anything that he wears or carries, except his racket in his hand or hands; or

(h) He throws his racket at and hits the ball.

EXPLANATION Referring to (d), a player may be deemed to have "touched the ball more than once" if the ball rests on his racket in such a way that the effect is more that of a "sling" or "throw" than a hit.

In (g), note that this loss of point occurs regardless of whether the player is inside or outside the bounds of his court when the ball touches him.

Case 1. In delivering a first service which falls outside the proper court, the Server's racket slips out of his hand and flies into the net. Does he lose the point?

Decision. If his racket touches the net while the ball is in play, the Server loses the point. (Rule 18 (e).)

Case 2. In serving, the racket flies from the Server's hand and touches the net before the ball has touched the ground. Is this a fault, or does the player lose the point?

Decision. The Server loses the point because his racket touches the net while the ball is in play. (Rule 18 (e).)

Case 3. A and B are playing against C and D. A is serving to D. C touches the net before the ball touches the ground. A fault is then called because the service falls outside the service court. Do C and D lose the point?

Decision. The call "fault" is an erroneous one. C and D have already lost the point before "fault" could be called, because C touched the net while the ball is in play. (Rule 18 (e).)

Case 4. May a player jump over the net into his opponent's court while the ball is in play and not suffer penalty?

Decision. No; he loses the point. (Rule 18 (e).)

Case 5. A cuts the ball just over the net, and it returns to A's side. B, unable to reach the ball, throws his racket and hits the ball. Both racket and ball fall over the net on A's court. A returns the ball outside of B's court. Does B win or lose the point?

Decision. B loses the point. (Rule 18 (e) and (h).)

Case 6. A player standing outside the service court is struck by the service ball before it has touched the ground. Does he win or lose the point?

Decision. The player struck loses the point (Rule 18(g), except as provided under Rule 13 (a).)

Case 7. A player standing outside the court volleys the ball or catches it in his hand and claims the point because the ball was certainly going out of court.

Decision. In no circumstance can he claim the point;

(1) If he catches the ball he loses the point under Rule 18 (g).
(2) If he volleys it and makes a bad return he loses the point under Rule 18 (c).
(3) If he volleys it and makes a good return, the rally continues.

EXPLANATION: In Case 6 above, the exception referred to is that of a served ball that has touched the net en route into the Receiver's court; in that circumstance it is a let service, not loss of point. Such a let does not annul a previous (first service) fault; therefore if it occurs on second service, the Server has one serve coming.

EXAMPLE: Player has let racket go out of his hand clearly before racket hits ball, but the ball rebounds from his racket into proper court. This is not a good return; player loses point under Rule 18 (h).

COMMENT: The strokes referred to in (d) of Rule 18 are difficult to define and to rule on. Some are obvious, others are arguable. Most experienced umpires give the player the benefit of the doubt, but do call it a double-hit if there is even the suggestion of a "second push" or, as noted in the explanatory note for (d), the return seems to be more of a sling than a hit. (WCT does not regard a carry or double-hit as a point-losing stroke unless the Chair Umpire deems it to have been "deliberate.")

RULE 19

Player Hinders Opponent

If a player commits any act either deliberate or involuntary which, in the opinion of the Umpire, hinders his opponent in making a stroke, the Umpire shall in that first case award the point to the opponent, and in the second case order the point to be replayed.

Case 1. Is a player liable to a penalty if in making a stroke he touches his opponent?

Decision. No, unless the Umpire deem it necessary to take action under Rule 19.

Case 2. When a ball bounds back over the net, the player concerned may reach over the net in order to play the ball. What is the ruling if the player is hindered from doing this by his opponent?

Decision. In accordance with Rule 19, the Umpire may either award the point to the player hindered, or order the point to be replayed. (See also Rule 23.)

USTA Interpretation: Upon appeal by a competitor that an opponent's action in discarding a "second ball" after a rally has started constitutes a distraction (hindrance), the Umpire, if he deems the claim valid, shall require the opponent to make some other, and satisfactory, disposition of the ball that is not in play on a given point.

RULE 20

Ball Falling on Line—Good

A ball falling on a line is regarded as falling in the Court bounded by that line.

COMMENT: In matches played without umpire or linesman, it is customary for each player to make the calls on all balls hit to his side of the net.

RULE 21

Ball Touching Permanent Fixture

If the ball in play touch a permanent fixture (other than the net, posts, cord or metal cable, strap or band) after it has hit the ground, the player who struck it wins the point; if before it hits the ground his opponent wins the point.

Case 1. A return hits the Umpire or his chair or stand. The player claims that the ball was going into court.

Decision. He loses the point.

RULE 22

Good Return

It is a good return:

(a) If the ball touch the net, posts, cord or metal cable, strap or band, provided that it passes over any of them and hits the ground within the Court; or

(b) If the ball, served or returned, hit the ground within the proper Court and rebound or be blown back over the net, and player whose turn it is to strike reach over the net and play the ball, provided that neither he nor any part of his clothes or racket touch the net, posts, cord or metal cable, strap or band or the ground within his opponent's Court, and that the stroke be otherwise good; or

(c) If the ball be returned outside the post, either above or below the level of the top of the net, even though it touch the post, provided that it hits the ground within the proper Court; or

(d) If a player's racket pass over the net after he has returned the ball; or

(e) If a player succeeded in returning the ball, served or in play, which strikes a ball lying in the Court.

Note.—If, for the sake of convenience, a doubles court be equipped with single posts for the purpose of singles game, then the

doubles posts and those portions of the net, cord or metal cable and band outside such singles posts shall be regarded as "permanent fixtures *other than* net, post, strap or band," and therefore *not* posts or parts of the net of that singles game.

A return that passes under the net cord between the singles and adjacent doubles post without touching either net cord, net or doubles post and falls within the area of play, is a good return. (But in doubles this would be a through" – loss of point.)

Case 1. A ball going out of court hits a net post and falls within the lines of the opponent's court. Is the stroke good?

Decision. If a service; no, under Rule 9 (c). If other than a service; yes, under Rule 22 (a).

Case 2. Is it a good return if a player returns the ball holding his racket in both hands?

Decision. Yes.

Case 3. The Service, or ball in play, strikes a ball lying in the court. Is the point won or lost thereby?

Decision. No. Play must continue. If it is not clear to the Umpire that the right ball is returned a let should be called.

Case 4. May a player use more than one racket at any time during play?

Decision. No: the whole implication of the rules is singular.

Case 5. May a player request that a ball or balls lying in his opponent's court be removed?

Decision. Yes, but not while a ball is in play.

RULE 23

Interference

In case a player is hindered in making a stroke by anything not within his control except a permanent fixture of the Court, or except as provided for in Rule 19, the point shall be replayed.

Case 1. A spectator gets into the way of a player, who fails to return the ball. May the player then claim a let?

Decision. Yes, if in the Umpire's decision he was obstructed by circumstances beyond his control, but not if due to permanent fixtures of the Court or the arrangements of the ground.

Case 2. A player is interferred with as in Case 1, and the Umpire calls a let. The Server had previously served a fault. Has he the right to two services?

Decision. Yes: as the ball is in play, the point, not merely the stroke, must be replayed as the rule provides.

Case 3. May a player claim a let under Rule 23 because he thought his opponent was being hindered, and consequently did not expect the ball to be returned?

Decision. No.

Case 4. Is a stroke good when a ball in play hits another ball in the air?

Decision. A let should be called unless the other ball is in the air by the act of one of the players, in which case the Umpire will decide under Rule 19.

Case 5. If an Umpire or other judge erroneously calls "fault" or "out" and then corrects himself, which of the calls shall prevail?

Decision. A let must be called, unless, in the opinion of the Umpire, neither player is hindered in his game, in which case the corrected call shall prevail.

Case 6. If the first ball served – a foul – rebounds, interfering with the Receiver at the time of the second service, may the Receiver claim a let?

Decision. Yes. But if he had an opportunity to remove the ball from the court and negligently failed to do so, he may not claim a let.

Case 7. Is it a good stroke if the ball touches a stationary or moving object on the court?

Decision. It is a good stroke unless the stationary object came into court after the ball was put into play in which case a "let" must be called. If the ball in play strikes an object moving along or above the surface of the court a "let" must be called.

Case 8. What is the ruling if the first service is a fault, the second service correct, and it becomes necessary to call a let under the provisions of Rule 23 or if the Umpire is unable to decide the point?

Decision. The fault shall be annulled and the whole point replayed.

COMMENT: See Rule 12 and Explanation thereto.

RULE 24

The Game

If a player wins his first point, the score is called *15* for that player; on winning his second point, the score is called *30* for that player; on winning his third point, the score is called *40* for that player, and the fourth point won by a player is scored *game* for that player except as below:

If both players have won three points, the score is called *deuce;* and the next point the score is again called *deuce;* and so on until a player wins the next point, he wins the game; if the other player

wins the next point the score is again called *deuce;* and so on until a player wins the two points immediately following the score at deuce, when the game is scored for that player.

COMMENT: In matches played without an umpire the Server should announce, in a voice audible to his opponent and spectators, the set score at the beginning of each game, and (audible at least to his opponent) point scores as the game goes on. Misunderstandings will be averted if this practice is followed.

RULE 25

The Set

A player (or players) who first wins six games wins a set; except that he must win by a margin of two games over his opponent and where necessary a set shall be extended until this margin be achieved. NOTE: See tiebreaker.

RULE 26

When Players Change Ends

The players shall change ends at the end of the first, third and every subsequent alternative game of each set, and at the end of each set unless the total number of games in such set be even, in which case the change is not made until the end of the first game of the next set.

RULE 27

Maximum Number of Sets

The maximum number of sets in a match shall be 5, or, where women take part, 3.

RULE 28

Rules Apply to Both Sexes

Except where otherwise stated, every reference in these Rules to the masculine includes the feminine gender.

RULE 29

Decisions of Umpire and Referee

In matches where a Chair Umpire is appointed, his decision shall be final; but where a Referee is appointed, an appeal shall lie to him from the decision of an Umpire on a question of law, and in all such cases the decision of the Referee shall be final, except that in Davis

Cup, Wightman Cup and Bonne Bell Cup matches the decision of a line umpire can be changed by the Referee, or by the Chair Umpire with the consent of the Referee.

The Referee, in his discretion, may at any time postpone a match on account of darkness or the condition of the ground or the weather. In any case of postponement the previous score and previous occupancy of courts shall hold good, unless the Referee and the player unanimously agree otherwise.

RULE 30

Play shall be continuous from the first service till the match be concluded; provided that after the third set or when women take part, the second set, either player is entitled to a rest, which shall not exceed 10 minutes, or in countries situated between Latitude 15 degrees North and Latitude 15 degrees South, 45 minutes, and provided further that when necessitated by circumstances not within the control of the players, the Umpire may suspend play for such a period as he may consider necessary. If play be suspended and be not resumed until a later day the rest may be taken only after the third set (or when women take part the second set) of play on such later day, completion of an unfinished set being counted as one set. These provisions shall be strictly construed, and play shall never be suspended, delayed or interferred with for the purpose of enabling a player to recover his strength or his wind, or to receive instruction or advice. The Chair Umpire shall be the sole judge of such suspension, delay or interference, and after giving due warning he may disqualify the offender.

EXAMPLE: In a best-of-five sets match, play is suspended because of darkness at one set all and 2-all in the third. Next day play is resumed, and after Player A wins the third set (10-8) he claims he is entitled to an intermission. He is not. Note that Rule 30 specifies the rest period may come after the third set of play on that day. In cases of prolonged delay, with resumption the same day, it is advisable to come to an agreement about any further rest periods before resuming play. (**Note**: Use of tie-breakers does not change USTA regulations regarding rest periods in most age-specified categories. In regular men's and women's divisions and in Men's 21 and Women's 21 a tournament may eliminate rest periods provided advance notice is given.)

(a) Any nation is at liberty to modify the first provision of Rule 30, or omit it from its regulations governing tournaments, matches, or competitions held in its own country, other than the Interna-

tional Lawn Tennis Championships (Davis Cup and Federation Cup).

(b) When changing sides a maximum of one minute shall elapse fromthe cessation of the previous game to the time players are ready to begin the next game. (This provision became operative in 1968.)

EXPLANATION: In Men's and Boys' 18 events there is no rest period in a best-of-three sets match, but in a best-of-five sets match a 10-minute rest may be taken (must, if either side requests it) after the third set. It may not be taken any time before the third set or at any time after the fourth set has been started. It must be taken after the third set or not at all . . . Likewise, in best-of-three matches where a rest period is allowed, it must be taken after the second set or not at all.

All boys' 18 matches shall be the best of three sets WITH NO REST PERIOD, except that in interscholastic, state, sectional and national championships the FINAL ROUND may be best-of-five. If such final requires more than three sets to decide, a rest of 10 minutes after the third set is MANDATORY.

In severe temperature-humidity conditions a Referee may rule that a 10-minute rest may be taken in a Boys' 18 best-of-three-set match. However, to be valid, this must be done before the match is started, and as a matter of the Referee's independent judgment, not in response to a request of a competitor or his coach.

Matches in all events for Boys' 16, 14 and 12 and Girls 18, 16, 14 and 12 shall be best of three sets; 10-minute rest before the third set is MANDATORY in Girls' 12, 14 and 16, and in Boys' 12 and 14, OPTIONAL in Girls' 18 and Boys' 16. (Optional means at the option of any competitor.)

In Men's 35 and all Seniors' age divisions, and in Father & Son matches, the rest period is optional.

Should a player, on account of physical unfitness or an unavoidable accident, not within his control, be unable to continue play, he must be defaulted.

If an Umpire decides that a player is deliberately stalling to gain time or unfairly disconcert his opponent he should warn the player once, and if the practice continues the Umpire should default him.

Case 1. A player's clothing, footwear, or equipment becomes out of adjustment in such a way that it is impossible or undesirable for him to play on. May play be suspended while the maladjustment is rectified?

Decision. If this occurs in circumstances not within the control of the player, of which circumstances the Umpire is the sole judge, a suspension may be allowed.

Case 2. If, owing to an accident, a player is unable to continue immediately, is there any limit to the time during which play may be suspended?

Decision. No allowance may be made for natural loss of physical condition. Consideration may be given by the Umpire for accidental loss of physical ability or condition.

COMMENT: Case 2 refers to an important distinction that should be made between a temporary disability caused by an accident during play, and disability caused by fatigue (cramps, for example). Not even momentary "rest" – other than the normal toweling-off pause at changeover – is allowed for recovery from "natural loss of physical condition."

Case 3. During a doubles game, may one of the partners leave the court while the remaining partner keeps the ball in play?

Decision. Yes, so long as the Umpire is satisfied that play is continuous within the meaning of the rules, and that there is no conflict with Rules 33 and 34.

COMMENT: When a player competes in an event designated as for players of a bracket whose rules as to intermissions and length of match are geared to a different physical status, the player cannot ask for allowances based on his or her age, or her sex. For example, a female competing in an intercollegiate (men's) varsity team match would not be entitled to claim a rest period in a best-of-three-sets match unless that were the condition under which the team competition was normally held.

NOTE: When a match is resumed following an interruption necessitated by weather conditions, it is allowable for the players to engage in a "re-warm-up" period. It may be of the same duration as the warm-up allowed at the start of the match; may be done using the balls that were in play at the time of the interruption, and the time for the next ball change shall not be affected by this.

THE DOUBLES GAME

RULE 31

The above Rules shall apply to the Doubles Game except as below.

RULE 32

Dimensions of Court

For the Doubles Game, the Court shall be 36 feet in width, i.e., 4½ feet wider on each side than the Court for the Singles Game, and those portions of the singles side-lines which lie between the two service-lines shall be called the service-side-lines. In other respects, the Court shall be similar to that described in Rule 1, but the portions of the singles side-lines between the base-line and service-line on each side of the net may be omitted if desired.

Case 1. In doubles the Server claims the right to stand at the corner of the court as marked by the doubles side line. Is the foregoing correct or is it necessary that the Server stand within the limits of the center mark and the singles side line?

Decision. The Server has the right to stand anywhere between the center mark and the doubles side lines.

RULE 33

Order of Service

The order of serving shall be decided at the beginning of each set as follows:

The pair who have to serve in the first game of each set shall decide which partner shall do so and the opposing pair shall decide similarly for the second game. The partner of the player who served in the first game shall serve in the third; the partner of the player who served in the second game shall serve in the fourth, and so on in the same order in all the subsequent games of a set.

Case 1. In doubles, one player does not appear in time to play, and his partner claims to be allowed to play single-handed against the opposing players. May he do so?

Decision. No.

EXPLANATION: It is not required that the order of service, as between partners, carry over from one set to the next. Each team is allowed to decide which partner shall serve first for it, in each set. This same option applies with respect to the order of receiving service.

RULE 34

Order of Receiving

The order of receiving the service shall be decided at the beginning of each set as follows:

The pair who have to receive the service in the first game shall decide which partner shall receive the first service, and that partner shall continue to receive the first service in every odd game throughout that set. The opposing pair shall likewise decide which partner shall receive the first service in the second game and that partner shall continue to receive the first service in every even game throughout that set. Partners shall receive the service alternately throughout each game.

EXPLANATION OF RULE 34

The receiving formation of a doubles team may not be changed during a set; only at the start of a new set. Partners must receive throughout each set on the same sides of the court which they originally select when the set begins. The first Server is not required to receive in the right court; he may select either side, but must hold this to the end of the set.

Case 1. Is it allowable in doubles for the Server's partner to stand in a position that obstructs the view of the Receiver?

Decision. Yes. The Server's partner may take any position on his side of the net in or out of the court that he wishes.

RULE 35

Service Out of Turn

If a partner serve out of his turn, the partner who ought to have served shall serve as soon as the mistake is discovered, but all points scored, and any faults served before such discovery shall be reckoned. If a game shall have been completed before such discovery the order of service remains as altered.

RULE 36

Error in Order of Receiving

If during a game the order of receiving the service is changed by the receivers it shall remain as altered until the end of the game in which the mistake is discovered, but the partners shall resume their original order of receiving in the next game of that set in which they are receivers of the service.

RULE 37

Ball Touching Server's Partner Is Fault

The service is a fault as provided for by Rule 9, or if the ball served touch the Server's partner or anything he wears or carries; but if the ball served touch the partner of the Receiver or anything which he wears or carries, not being a let under Rule 13 (a), before it hits the ground, the Server wins the point.

RULE 38

Ball Struck Alternately

The ball shall be struck alternately by one or other player of the opposing pairs, and if a player touches the ball in play with his racket in contravention of this Rule, his opponents win the point.

EXPLANATION: This means that, in the course of making one return, only one member of a doubles team may hit the ball. If both of them hit the ball, either simultaneously or consecutively, it is an illegal return. The partners themselves do not have to "alternate" in making returns. (Mere clashing of rackets does not make a return illegal, if it is clear that only one racket touched the ball.)

Should any point arise upon which you find it difficult to give a decision or on which you are in doubt as to the proper ruling, immediately write, giving full details, to John Stahr, U.S.T.A. Umpires Committee, 65 Briar Cliff Rd., Larchmont, N. Y. 10538, and full instructions and explanations will be sent you.

USTA Tournament Regulations

1. **Application.** The Tournament Regulations herein contained and the international Rules of Lawn Tennis shall be observed throughout all tournaments held by clubs, associations or organizations belonging directly or indirectly to the USTA. In any match conducted without officials the principles and guidelines set forth in the official USTA publication The Code shall apply. (The Code is available from USTA Publications, 71 University Place, Princeton, N.J. 08540.)

2. **Tournament Committee.** The governing body of a club, association or organization conducting a tournament will appoint at an appropriate time before the start of the tournament a Tournament Committee of at least two persons, indicating which member is to be Tournament Chairman (who may also be referred to as tournament director); the Referee will be an additional member of the Committee. This Committee will:

   a. Supervise all administrative details of the tournament, including keeping order on the grounds and obtaining any required USTA sanction.
   b. Appoint a referee, preferably a USTA-certified chair umpire, who shall be a member of the committee. The Tournament Chairman is not authorized to take over the prerogatives of the Referee.
   c. Issue a circular specifying the events, the dates of play, maximum number of sets in matches, and other pertinent details such as type of ball to be used, type of surface or surfaces, etc.
   d. Issue invitations and accept entries.
   e. Furnish the Referee a complete list of entrants (including alternates in priority) for all events, and, in conjunction with the Referee, determine the seedings.
   f. Act as an appeal body in cases in which a Referee has unilaterally disqualified a player; its decision on such an appeal shall be final.
   g. Within 10 days after the completion of a tournament submit to the USTA a complete report of all matches played (proper blanks are obtainable from the USTA or the Section), indicating where practicable each player's full name and address; and within 30 days after the completion file such reports as are required by USTA Standing Orders. Failure to submit these reports may bring about disciplinary action by the USTA Executive Committee.

3. **Referee.** The Referee will:

   a. Serve as a member of the Tournament Committee.
   b. Assisted by preferably two Committee members but at least one, make the draw publicly at the time and place specified by

the Committee; preferably assisted by a Committee member, make substitutions in the draw when appropriate.

c. Exercise general supervision over all aspects of play, including, *but not limited to, the conduct and actions of players*, umpires, ball boys, groundskeepers and the administrative crew. He is empowered to use his best judgment in all situations not specifically covered by the rules.

d. Appoint a deputy to act in his stead whenever he will be away from his normal post and out of touch with it for any reason whatsoever, including his participation in a match as a player or as an umpire. Either the Referee or his deputy must be present at all times when play is in progress.

e. Default a player for cause, which includes, but is not limited to, tardiness, misconduct, or failure to follow his instructions or those of the Chair Umpire.

f. Consider an appeal from a player who has been defaulted by the Chair Umpire; the decision of the Referee on such an appeal shall be final.

g. Schedule matches, assign courts (including moving a match in progress to another court), postpone or suspend play when weather, light, surface conditions or other circumstances justify so doing. (Suspension of a match because of darkness should be done only at the end of an even number of games in the set.)

h. Appoint and replace or re-assign, when necessary, chair umpires, line umpires and net umpires. The appointing of these officials (but not their replacement) may be delegated to the Chief Umpire, if there is one.

i. When he deems it appropriate, before the start of a tournament, or before the start of any round, or before the start of any match, order the use of the Point Penalty System.

j. Decide any point of law that a chair umpire is unable to decide or which is referred to him as an appeal by a player. When the matter under consideration affects the scoring of the match, the Chair Umpire will immediately bring it to the Referee's attention, suspending play during the decision; in all other cases of appeal play should be continued while the matter is being considered. The Referee's decision in such cases shall be final.

k. Within three days after the end of a tournament, report, either orally or in writing, to the sectional or higher grievance committee, any violations of Article 7, especially Paragraphs e, f, or g, or any other conduct violations.

4. **Chair Umpire.** The Chair Umpire will:

a. Conduct the match in accordance with the Rules of Lawn Tennis and these Tournament Regulations.

b. In the absence of any of his line or net umpires, assume himself all their duties except those which he may delegate to the players.
c. When the Referee or Chief Umpire has not given specific assignments to the various line umpires assigned to his match, make these assignments himself in the way best to utilize their services. (If he deems it advisable he may rearrange these assignments after the match has begun.)
d. Only if he deems it advisable, in response to a request from a player or for other reasons, request the Referee to replace one or more of his umpires. If a player requests that the Chair Umpire himself be removed the Chair will relay the request to the Referee. In any of these cases play should continue pending the Referee's decision.
e. Call the points, games and sets at the end of each, respectively, and when he is asked to call them, and record them on his scorecard.
f. See that the players change ends in accordance with the rules (allowing them no delay or rest during a tiebreak changeover), see that they resume play promptly at the end of an authorized rest period, and see that play is continuous.
g. Sign the scoreboard at the end of the match and deliver it without delay to the Chief Umpire or the Referee. (Should the Chair Umpire fail to do so, such an omission will not invalidate the match.)
h. When one of his umpires is unable to make a call, make the call himself if he can, availing himself of his own opinion, of the opinion of another official (including the Referee's) in a position to see the shot, or of an agreement between the players. While a replay is to be avoided if at all possible, he will order a point replayed if a valid call cannot be made.
i. When in his opinion playing conditions justify suspension of the match, advise the Referee and, when practicable, obtain his approval before suspending play. (See 3g.)
j. Make the final decision on every question of fact in the match other than those within the authority of the Net Umpire or the Line Umpires.
k. Decide all points of law, subject to an appeal by a player, on such a point, to the Referee. (See 3j.)
l. Permit no coaching in junior matches except as provided in Article 9.
m. Default a player for cause, which includes, but is not limited to, tardiness, misconduct, or failure by the player to comply with instructions.

5. **Net Umpire.** The Net Umpire, in the absence of other arrangements with the Chair Umpire, will:

a. By signal or by a call of "net," make sure the Chair Umpire knows any time a served ball touches the net in passing.
b. Call all violations during play in which: (1) a ball in play touches a player; (2) a player touches the net; (3) a player invades his opponent's court; (4) a player strikes his opponent's return before it has passed the net; (5) a not-up (double-bounce) occurs; (6) a carry, double-hit or other illegal stroke is made. The Net Umpire's decision on any of these violations is final. He may be overruled only in the same circumstances under which a line umpire may be overruled. (See 6-a.)
c. See that balls are changed at the proper times, and check each new ball for suitability.
d. Adjust the net to the proper height before play begins, on changeover games at the start of each succeeding set, and at such other times as the Chair Umpire may desire.
e. Keep an alternate scorecard as a check for the Chair Umpire.

6. **Line Umpire.** A Line Umpire will:
a. Call all shots relating to the lines to which he is assigned; his decisions shall be final. (A line umpire may not be overruled on a question of fact except in Davis Cup, Wightman Cup and Bonne Bell Cup competition – see Rule 29; he may be overruled when a decision is based on an incorrect interpretation of a rule.)
b. Promptly indicate to the Chair Umpire by an unsighted signal when he is unable to make a call within his area of responsibility.
c. On the Chair Umpire's request, provide an opinion, when he has a firm one, on a shot that is outside his area of responsibility.
d. When assigned to a baseline, a sideline, or a center line, call foot faults that pertain to his line.

7. **Player.** A player may:
a. If otherwise eligible, enter a regular men's or women's tournament without restriction as to age.
b. If otherwise eligible, enter a tournament in any of the minimum-age categories (Men's 35, Seniors 50, 55, etc.) if the player will have reached such minimum age by October 31 of the twelve-months period ending October 31 during which the tournament starts.
c. If otherwise eligible, enter a tournament in any of the maximum-age categories (12-, 14-, 16-, 18- and 21-and-under) if the player is an amateur who has not reached such maximum age prior to October 1 of the twelve-month period beginning October 1 during which the tournament starts.

d. If otherwise eligible, enter a parent-child tournament without restriction as to age, provided that the parent and child are blood relatives or that the child has been legally adopted by the parent.

N.B. *The ranking year for all divisions except seniors and women is October 1 through September 30; for senior men, senior women and women the ranking year is November 1 through October 31. The eligibility year for any division coincides with the ranking year for that division.*

e. Not enter a tournament he knows he will be unable to finish, nor transfer his entry in a tournament to another player.

f. Not enter more than one tournament scheduled for any part of the same period unless each tournament committee involved understands the situation and concurs with such arrangements as are made.

g. After the draw has been made, not withdraw from the tournament except for illness, personal emergency or other bona fide reason.

h. Not wear other than flat-soled shoes without heels at any time, except when playing on grass and the Referee has authorized the use of spikes (maximum length: three-eighths of an inch).

i. Not depart from the grounds until he has obtained from the Referee either the time of his next match or a clearance to depart. Unless specifically authorized by the Referee, schedules of play carried in newspapers or other media are not official and a player utilizes them at his own risk.

j. Be defaulted for cause, which includes, but is not limited to, tardiness, misconduct, or failure to comply with the Referee's or the Chair Umpire's instructions.

8. **Betting**: Neither the Referee, nor the Chief Umpire, nor any Umpire, nor any member of the Tournament Committee shall bet on any match in the tournament. If an infraction of this rule occurs, the Tournament Committee shall immediately remove the offender from any further connection with the tournament.

9. **Coaching.** During adult matches coaching is permissible provided it does not bring about a violation of Rule 30 or of the canons of sportsmanship. During individual competition in junior matches no coaching of any kind is permitted except during an authorized intermission (the one-minute odd-game changeover is not an authorized intermission). The same rules apply to junior team competitions unless they have been modified in advance by an agreement between the teams. Violation of this regulation renders the player and his adviser liable to disciplinary action, which may include disqualification of the player.

10. **Seeding.** While there is no requirement that every tournament have seedings, most tournaments of the elimination type as

distinguished from round-robin competitions – do use seedings, as a means of insuring that players of recognized outstanding ability are kept from having to confront each other in the early rounds.

a. The Tournament Committee is empowered to seed players at a maximum ratio of one seed for every four players or major fraction thereof (i.e., two or three players more than an even multiple of four does justify an additional seed; one player more does not). The most preferred pattern is to seed one for each eight competitors. The draw sheet should list the seeded players, preferably in numbered order.

b. In determining seedings the Committee should bear in mind that seedings merely represent its subjective ratings of the various players' chances of winning the tournament. These ratings cannot be based on whim, caprice, or "hunches", but instead must be justified by a reasonable amount of factual evidence. The Committee should consider all available evidence, including, but not limited to, rankings, current records, type of surface, and particularly head-to-head encounters.

c. Illustrative of some common errors in seeding are: "He's ranked #1, so he must be seeded #1;" "He won the tournament last year so he must be seeded #1 this year;" "Since this is his first year as a senior and he has no record in senior play, he can't be seeded – or he can be seeded no higher than five." Consideration of the factual data mentioned in the preceding paragraph will obviously eliminate these errors. Also, two outstanding doubles players playing together for the first time should definitely be considered for a place on the seeded list.

d. An even more common error, for example, is where the Committee in a 16-draw event seeds four and "places" four. Legally, there is no such thing as "placing." In the example cited, use of the term is an attempt to hide the fact that in reality eight players have been seeded instead of the permissible maximum of four. The rule of "one in four" was established to provide some matches between strong players in the first round, to increase the variety of a player's opponents, and to get away from the "strong-weak-strong-weak" pattern in the draw, thereby giving players who are usually first-round losers an occasional opportunity to meet each other and advance to the second or third round. No matter how sure the Committee is of its own omniscience, this is a rule that should not be violated.

II. **Where The Seeds Go.**

a. Every seeded position is determined by lot. When there are just two seeds, they are drawn for the top line and bottom line. The same principle is followed for the remainder of

the seeds, with each seeded player in the top half of the draw being placed on the top line of his segment, and each seeded player in the lower half being placed on the bottom line of his segment. See sample drawsheet that follows.

b. The principle of drawing to place the seeds will be followed even though it may result in one half of the draw having more seeds than the other half. For example, in a 32-draw with six seeds the luck of the draw might properly result in one half having four seeds and the other having two.

c. Specifically:

1. For a 16-draw with two seeds: Seeds 1 and 2 are drawn for Lines 1 and 16. If there are to be Seeds 3 and 4, they are drawn for Lines 5 and 12.

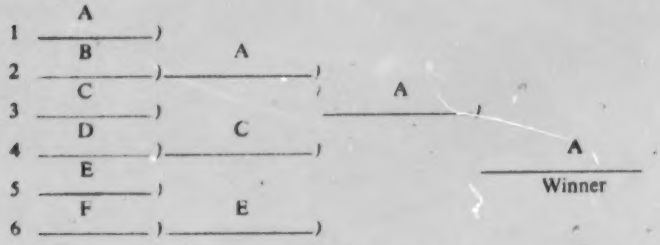
2. For a 32-draw, with four seeds: Seeds 1 and 2 are drawn for Lines 1 and 32; Seeds 3 and 4 are drawn for Lines 9 and 24. If eight are to be seeded, Seeds 5, 6, 7, and 8 are drawn for Lines 5, 13, 20 and 28.

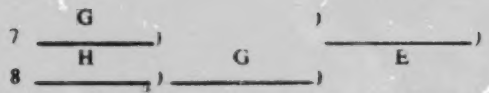
3. For a 64-draw, with eight seeds: Seeds 1 and 2 are drawn for Lines 1 and 64; Seeds 3 and 4 are drawn for Lines 17 and 48; Seeds 5, 6, 7, and 8 are drawn for Lines 9, 25, 40 and 56. If 16 are to be seeded, Seeds 9 through 16 are drawn for Lines 5, 13, 21, 29, 36, 44, 52, and 60.

4. For a 128-draw, with 16 seeds: Seeds 1 and 2 are drawn for Lines 1 and 128; Seeds 3 and 4 are drawn for Lines 33 and 96; Seeds 5, 6, 7, and 8 are drawn for Lines 17, 49, 80 and 112; Seeds 9 through 16 are drawn for Lines 9, 25, 41, 57, 72, 88, 104 and 120. (It is virtually unheard-of for tournaments of this size to be seeded more liberally than the one-in-eight pattern.)

12. **How To Make The Draw**

a. When the number of players is 4, 8, 16, 32, 64, 128 or any higher power of 2 they shall meet in even pairs in progressive elimination in accordance with the following pattern:





b. When the number of players is not a power of 2 the first round will have byes for the purpose of bringing to the second round a full bracket of players – i.e., a power of 2 – so that there can be an orderly progression down to two finalists. For example, with 27 players five of the lines on a 32-draw sheet would be marked "bye" and the five players drawn opposite those lines would move right into the second round without playing a match, to be joined there by the eleven winners of first round matches to make up an even sixteen. See sample draw sheet that follows.

c. To place the byes in the draw start at the extremes and work toward the middle. The first bye goes on the line next above the bottom line, the second on the line next below the top line, and the third on the second line above the first bye, the fourth on the second line below the second bye, and so on in alternation. Obviously, if there is an odd number of byes the lower half will have one more bye than the upper half. This pattern of distribution of byes is mandatory for all sanctioned tournaments at the level of district, section or higher championships, except the Woman's Collegiate Championship and other collegiate tournaments.

d. Once the seeded players and the byes have been written in, fill in the rest of the draw by drawing the names of the remaining players and putting them on the unoccupied lines in the order in which they are drawn, starting at the top and moving downward in sequence.

e. When the number of players is only a few over an even bracket – for example, 37 – it may be simpler, as an alternate to the method described in the preceding paragraph, to "build up" from a 32-draw sheet than to "build down" from a 64-draw sheet. To do this, create as many two-line pairings as there are excess players, starting with the bottom line in the upper half, then the top line in the lower half, then the next to the bottom line in the upper half, then the next to the top line in the lower half, and so forth in alternation. Obviously, if the number of excess players is odd there will be one more first-round match in the upper half than in the lower. A seeded player is not exempt from playing a first round match if his line in the draw is one of those to carry a double pairing.

f. When the drawing procedure operates to bring together for their first match members of the same family, same school, same foreign country, same club, or same Section, the Referee may, at his discretion, place the second name drawn on the corresponding line of the next quarter of the draw. If this happens in the fourth quarter of the draw, the second name may be exchanged with the name on the corresponding line in one of the three preceding quarters, the specific one of these quarters being determined by drawing.

13. **Substitutions In The Draw.**

a. When the number of entrants exceeds the number to which the draw is limited the Committee will prepare a list of alternates in priority for use by the Referee in replacing players who become unavailable for the competition. Priority on this list will normally be determined by ability; however, if priority cannot be determined using ability as a criterion then the determination will be made by lot. Dates of receipt of entries should never be used as a criterion provided the entries of all those considered were received before the deadline.

b. In a draw which contains some byes the Referee, preferably assisted by a Committee member, may accept a late entry (or entries) and place the name in the last slot covered by a bye. While the taking or not taking of this action is strictly a prerogative of the Referee based on his estimate of the situation, in general it is desirable to encourage play rather than to discourage it.

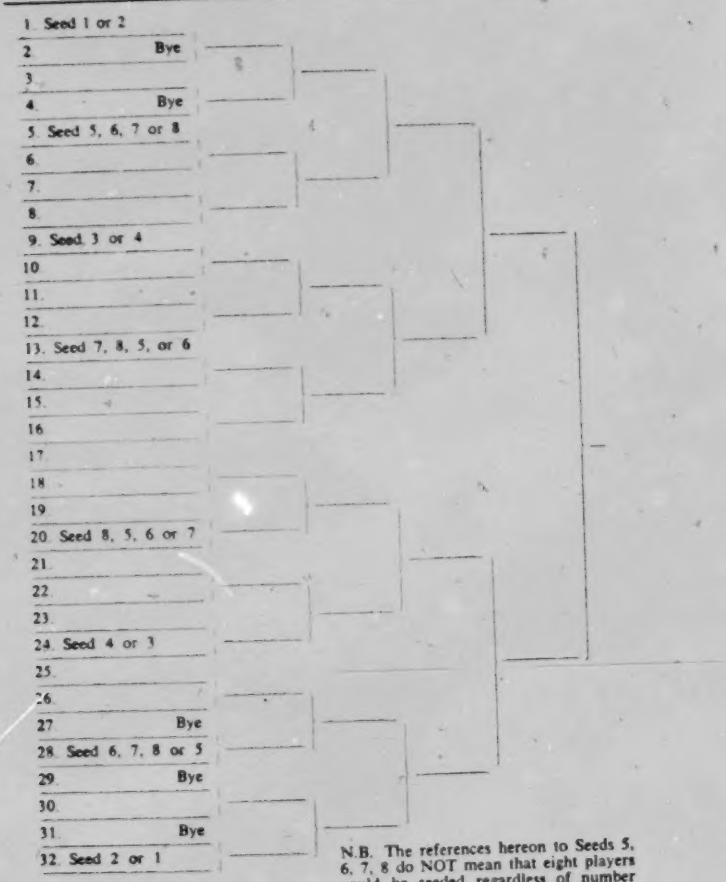
c. It might be logical to reject the late entry of a player whose ability would justify his being seeded, in that inserting his name in a bye slot might upset the balanced arrangement of the draw. On the other hand, it would not be illogical to insert the name of a player of much lesser ability in a bye slot.

d. Unless the Referee determines that play has proceeded too far to make changes in the draw practicable, any player whose entry is received on time and is otherwise acceptable will not be denied a place in the draw because of administrative error or oversight on the part of the tournament officials even if it means remaking the draw or having a preliminary match.

14. **Violations.** Any player or official who observes a flagrant violation of these regulations may file a written complaint with the chairman of the grievance (or comparable) committee of the Section where the tournament was held, or with the Chairman, USTA Grievance Committee. In general, if the tournament included

32-PLACE DRAW SHEET

(With 27 entries, as here, **maximum** seed would be 7)



N.B. The references hereon to Seeds 5, 6, 7, 8 do NOT mean that eight players could be seeded regardless of number of entries (i.e., less than 32). See preceding text.

any nationally ranked players it would be preferable to file such a complaint with the Chairman, USTA Grievance Committee. (See Sec. 41, USTA By-Laws.)

NOTE to Tournament Chairmen and Referees:

You may be administering tournaments that are under the auspices of Grand Prix, WCT, WTA, IPA or other major organizations whose regulations may be at variance with the foregoing in some respects. In such situations you should reach a firm understanding with the officials of the other organization – before the event starts – on all points of variation.

TIE-BREAK PROCEDURES
Authorized for 1976 USTA Sanctioned Tournaments at 6 Games All

The USTA has approved the same options as to tie-break methods for 1975 sanctioned tournaments as were available in 1974. These include the 9-point, 12-point, and 13-point methods for terminating a set after 6 games all. Also, the option to use No-Ad (maximum of seven points) scoring for individual games is continued. The tie-break procedure may be used, at the discretion of the tournament committee, either throughout a tournament event or events, or in a designated round or rounds, with such matches to be considered for ranking purposes as having equal merit with matches not utilizing a tie-break or No-Ad procedure. A basic requirement is that reasonable notice shall be afforded prior to the commencement of competition.

This departure from conventional scoring is permissive, **not mandatory**, and a tournament committee has the option of prescribing that, even in an event where a tie-breaker is in use, the identifiable final set of the match or matches in any designated round or rounds shall be decided by conventional scoring.

Tournaments requiring sanction from the International Lawn Tennis Federation (ILTF), Grand Prix events, and tournaments with prize money of $17,500 or more, may use only the "Wimbledon" style 7-of-12-point method for tie-breaks, and may not use No-Ad. The 1974 annual meeting of that organization so determined, making an exception to allow the 13-point tie-break method for tournaments being conducted by World Championship Tennis (WCT). For Sectional ranking purposes any scoring method may be utilized with the consent of a Sectional Association, and matches held under such method may be considered on equal merit with other matches.

5 out of 9 Points (Sudden Death)

Singles: If it is Player A's turn to serve the 13th game (at 6-all) he shall serve Points 1 and 2, right court and left court; Player B then serves Points 3 and 4 (R and L). Players then change sides, and A serves Points 5 and 6; B serves Points 7 and 8. If the score reaches 4 points all, Player B serves Point 9 from the right or left court at the election of the receiver.

The set shall be recorded as 7 games to 6. The tie-break counts as one game in reckoning ball-changes.

Player B shall serve first in the set following the playing of the tie-break (thus assuring that he will be first server if this set also goes into a tie-break). The players shall "stay for one" after a tie-break.

(Umpires should note that, if a ball change were called for on the tie-breaker game, the change should be deferred until the second game of the following set, to preserve the alternation of the right to serve first with new balls.)

Doubles: In Doubles the same format as in singles applies, provided that each player shall serve from the same end of the court in the tie-break game that he has served from during that particular set. (Note that this operates to alter the sequence of serving by the partners on the second-serving team.)

7 out of 12 Points ("Wimbledon" Method as Approved by ILTF)

Singles: A serves first point (from Right court); B serves points 2 and 3 (Left and Right); A serves points 4 and 5 (Left and Right); B serves point 6 (Left) and after they change ends, point 7 (Right); A serves points 8 and 9 (Left and Right); B serves points 10 and 11 (Left and Right), and A serves 12 (Left). If points reach 6-all, players change ends and continue as before. A serves point 13 (Right); B serves points 14 and 15 (Left and Right); etc., etc., etc., until one player establishes a margin of two points. Players change ends for one game to start the next set, with Player B to serve first.

Doubles follows the same pattern, with partners preserving the sequence of their serving turns.

(Assuming A & B vs. C & D) Player A serves first point (Right); C serves 2 and 3 (Left and Right); B serves 4 and 5 (Left and Right); D serves Point 6 (Left) and, after teams change ends, point 7 (Right) . . . A serves 8 and 9 (Left and Right); C serves 10 and 11 (Left and Right), and B serves point 12 (Left) . . . If points reach 6-all; teams change ends and continue as before — B serves point 13 (Right); D serves points 14 and 15 (Left and Right); etc., etc. until one team establishes a margin of two points. Teams change ends for one game to start the next set with team C & D to serve first.

Note: In this Wimbledon style tiebreaker, serve rotation is maintained, although each of the four players may find that he must serve from the end of the court opposite to that from which he served during the set.

In 1975 WCT is continuing use of a "7-of-13" variation exactly the same pattern as Wimbledon's 7 out of 12 points but with the 13th point deciding the set. That point is served by the player who had served the 12th point, and the Receiver has the option as to left or right court. Players "stay for one" at the end of this tiebreaker.

"No-Ad" Scoring

The "No-Ad" procedure is simply and precisely what the name implies.

A player need win only four points to win a game. That is, if the score goes to three-points-all (or deuce) the next point decides the game – it's game point for both players. The Receiver has the right to choose to which court the service is to be delivered on the seventh point.

If a No-Ad set reaches 6 games all, a tiebreaker shall be used which normally would be the "5 out of 9 points" Sudden Death method.

Note: The score-calling terminology for a match played in No-Ad may be either in the conventional terms or in simple numbers, i.e., "zero, one, two, three (game point), game."

Cautionary Note:

Any ILTF tournament should get special authorization from ILTF before using No-Ad.

Special USTA Championship Tournament Regulations

Regulations For USTA Junior Championships

1. Annually there shall be one tournament for boys and one for girls in each age division (18, 16, 14, 12 and under) designated as "The USTA National Championships" which shall be open to citizens of the U.S. and non-citizens who in the judgment of the tournament committee have established residence in the United States. After the draws are filled with U.S. players, foreign players who in the judgment of the tournament committee are qualified may be admitted. All other tournaments sanctioned as USTA Championships must eliminate the word "The" and must designate

the court surface (e.g. USTA National Hard Court, USTA National Clay Court, or USTA National Indoor Championships). The playing surface of these tournaments shall be selected by the respective championship committee with the approval of the USTA Junior Tennis Council.

2. Entries for all USTA Junior Championships together with the entry fee must be in the hands of the Championships Committee by the date stated on the entry blank.

A. No player shall be permitted to enter a USTA Championship unless he or she shall have first been endorsed by the Sectional Endorser (see below) of the Section in which the player lives.

B. Except as provided above for "The USTA National Championships", the other Championships Committees may accept the entries of foreign players who submit proof they are within the established age limits (i.e. birth certificate, passport).

C. All USTA Boys and Girls 18 and 16 National Tennis Championships shall have a draw of 128 if that number of sectionally endorsed or otherwise qualified players (according to the Regulations) apply. All USTA Boys and Girls 14 and 12 National Tennis Championships shall have a draw of 96, if that number of sectionally endorsed or otherwise qualified players (according to the Regulations) apply. The Chairperson of a USTA Junior Tennis Championships Committee may, at its discretion, enlarge the draw with other sectionally endorsed players. In the event of cancellation for any cause, sectionally endorsed alternates shall be placed in the draw, if available.

D. Each Section of the USTA shall be entitled to a quota of entries in USTA Championships and this quota shall be based on the ratio that the Sections' Junior enrollments bear to the total USTA Junior enrollment. This ratio shall be multiplied by 100 (for a draw of 128), 75 (for a draw of 96), 50 (for a draw of 64), or 25 (for a draw of 32) to determine the quota for the Section. Enrollment shall be based on the aggregate totals in each Section and the cumulative totals throughout the USTA as of December 31st in each preceding calendar year.

Notwithstanding the above, no Section shall have more than 16 quota places in a draw of 128, 12 quota places in a draw of 96, or 8 quota places in a draw of 64 regardless of the percentage of USTA enrollment, and in all draws of 96 or more each Section shall be entitled to a minimum of two spots.

For the USTA Girls 18 National Championships, there shall be a special quota so that each Section sending a team to the Girls

Intersectional matches be given a minimum quota of five. The regular quota system described above will apply thereafter.

The above quotas in this section have been established for a two year trial period ending October 1, 1976. If they have not been changed by the 1977 USTA Annual Meeting, they will remain applicable until amended.

The various Championships Committees shall use their discretion in filling the places in the draw not provided for by the quota system by accepting the best qualified entrants still available. The Championships Committees shall accept additional players over quota from the various sections only in the numerical order in which they were submitted by their respective Sectional Endorsers.

3. **Sectional Endorsers:**

Each Sectional Association shall name a Sectional Endorser for the boys and one for the girls. These Sectional Endorsers should be familiar with the playing records of the juniors within his (her) Section). The Sectional Endorser shall select the best qualified players available for participation in the USTA Championships. It shall be the responsibility of the Sectional Endorser to provide the various Championship Committees with a list of these players whose legal residence is within the Section and whose entries are recommended by said Sectional Association. These lists should rank the players in the order in which the Section believes their records place them. The Sectional Endorser may change the order of the players at any time until the entries close, and, if appropriate, include alternates.

Entry blanks for all USTA Championships shall be sent to the Sectional Endorser. He (she) is responsible for distributing them throughout his (her) Section and seeing that they are properly filled out and returned to the Championship Committee before the entries close. Each entry blank must be signed by the Sectional Endorser before it will be accepted by the tournament committee.

If any entry is received by a Championship Committee that is not on a Sectional Endorser's list nor has his (her) signature, that Sectional Endorser shall be notified in advance of the entry being accepted and the entry cleared with the Sectional Endorser.

The above regulations concerning the Sectional Endorsers apply to the places in the draw allocated to each Section by

the quota system. The Championships Committees shall follow the Sectional Endorsers' numerical lists both with regard to the quota, and in filling places not covered by the quota.

4. In all USTA Championships, the draws are to be made so as to avoid, if possible, the presence in the same quarter of more than one of the first four players representing the same Sectional Association.

5. NO TIE BREAKERS will be used in the third or fifth sets in USTA National Junior Championships.

6. Beginning October 1, 1975, all boys and girls of age categories 12 and 14 are required to play in their own age division in all USTA Championships except those players Nationally ranked 1, 2, 3, or 4 and still remaining in same age category.

   (Example: A player is 13 years old and is Nationally ranked number 4 in the 14 and under age division. This player may choose to play another year in the USTA Indoor, USTA Hard Courts, USTA Clay Courts and The USTA National 14 Championships or choose to play up in all USTA 16 Championships. A player must play in the same age division in all USTA Championships.)

   In the Ranking Year beginning October 1, 1976, all Boys and Girls in the 16 age category will also have to play only in their own age division in all USTA Championships unless they are nationally ranked 1, 2, 3, or 4 and still remaining in same age category.

USTA INTERSCHOLASTIC CHAMPIONSHIPS

1. The competition shall be known as "The USTA Interscholastic Tennis Championships."

2. Such championships shall be played annually, the time and place to be determined by a standing committee of the USTA. (par. 8).

3. To be eligible to compete a player must be the semi-finalist in a qualifying interscholastic tournament which must be held in the United States by or under the direction of a college, university, school or USTA Sectional Association, hereinafter referred to as the "Holder."

4. Notice of intention to hold a qualifying tournament shall be filed prior to the event by the Holder with the Executive Secretary, USTA, 51 East 42nd St., New York, N.Y. 10017. Written approval of the Executive Office of the USTA must be obtained before any qualifying tournament may be scheduled.

5. The Holder shall admit to competition, under such rules and limitations as the Holder may prescribe, students certified by a responsible school official to have been in good standing at a preparatory school or high school located within the United States, or within any foreign country, during the current school year.

Entries shall not be accepted from high schools affiliated with the National Federation of State High School Athletic Associations, unless such entries have been approved by the Federation.

A semi-finalist in Singles and/or Doubles in any preceding qualifying tournament held during the currently qualifying period shall not be eligible for re-entry in a succeeding qualifying tournament for the current championships.

6. The Holder shall immediately communicate the results of all matches to the Executive Secretary, USTA, and the Chairman of the Interscholastic Tennis Tournament Committee of the institution holding the championship event, and such communication shall in every case include the home address of the semi-finalists in each completed competition, together with the certificates of responsible school officials as to such semi-finalists, as required by par. 5 above.

7. The Holder shall be permitted to charge an entry fee to such Qualifying Tournaments to provide whatever revenue may be necessary to cover the purchase of balls and other tournament expenses. Neither the USTA nor its Sectional Associations shall be liable for financial deficits arising from the operations of a Qualifying Tournament.

8. A standing committee of the USTA shall promote and be responsible for the championship competitions. Such committee shall have power to accept entry of outstanding schoolboy players who actually had no opportunity to attend a Qualifying Tournament, and who are recommended by Sectional Associations or by individuals whose opinions should carry weight. Although a player may qualify in all respects and be eligible to enter a championship competition, the Championship Committee shall have full power in its discretion to reject any entry or limit the number of entries. The Committee shall, from its membership if practicable, appoint a Referee and an Assistant Referee for the USTA Interscholastic Championships, Singles and Doubles. The Committee shall select a date when entries will close.

9. All matches in the Championship competitions shall consist of best two of three sets in all rounds excepting the final round which may consist of best of five sets.

10. Entry to qualifying Doubles competitions shall be limited to teams nominated as such by individual schools, and members of a doubles team must be schoolmates representing the same school. Qualifiers in Doubles may be permitted at the discretion of the Committee, to play in both Singles and Doubles.

11. Points for the team score shall be awarded for each event (singles and doubles) on the following basis:

1 point for each match won. In the case of a bye or a default in the first round no point shall be awarded unless the player or double team shall win the next round match, in which case 2 points shall be awarded, one for the bye or default and one for the next round match win.

12. No school may enter more than four singles players and two doubles teams.

USTA JUNIOR DAVIS CUP SECTIONAL TEAM CHAMPIONSHIP

1. The event shall be known as the USTA Junior Davis Cup Sectional Team Championships.

2. This event be held annually.

3. The competition is open to teams representing each of the Sections comprising the United States Tennis Association. Each of said sections shall be represented by one team which shall consist of male players only.

4. Membership on each Section Team shall be by arbitrary selection of the section and the Junior Davis Cup Chairman in each section shall select the sectional team for his own section; the president of each section shall act in case his section does not have a sectional Chairman. The method of selection for membership on the sectional team may be as each section elects, either on the basis of ranking lists, center tournaments, regional center play-offs, inter-city Junior Davis Cup matches, tournaments, elimination try-outs, round-robins, character, sportsmanship and availability, or any combination of these factors.

5. Players selected for membership on each Section's team must be permanent residents of their respective Sections. Each team member shall not have reached his 21st birthday prior to the 1st day of October of the year immediately preceding the year of the tournament and each player is required to possess current USTA membership card.

6. The number of players on a Sectional Team shall be a maximum of four. (Maximum two singles players and one doubles team for scoring purposes.)

7. The referee of the tournament shall be the National Chairman of the Junior Davis Cup Committee of the USTA or the person designated as referee by him.

8. All matches shall be played under the laws and rules of lawn tennis as sanctioned and interpreted by the USTA. The tournament shall consist of both singles and doubles play. Points shall be earned in both singles and doubles as follows: Winner–5 points; Finalists–4 points; Semi-finalists–3 points; Quarter-finalists–2 points. A con-

solation tournament for singles only shall be conducted at the same time and place as the tournament herein provided and first-round losers shall automatically be entered in the consolation round and shall play in it. Points in the consolation round shall be at one-half the value of the main tournament. The Sectional Team scoring the most points in the main tournament plus the points earned by its players in the consolation event, shall be declared the winner of the event. In case of ties, the two Sectional Teams earning the same number of points shall be declared co-holders of the place earned by their point scores.

USTA GIRLS' NATIONAL INTERSECTIONAL TEAM CHAMPIONSHIPS

1. The bowl shall remain in perpetual competition.
2. Competition shall be limited to players qualified to participate in Girls' Tournaments as set forth in the Regulations of USTA for Junior Qualifying and Championship Tournaments.
3. The competition shall be called the *"USTA Girls' National Intersectional Team Championships"* and shall be held annually near the locality where the USTA Girls' 18 National Championship is played.
4. The competition shall be open to one team representing each of the Sectional Association of USTA.
5. The Bowl will be awarded annually to the Sectional Association represented by the winning team, which Sectional Association shall retain custody thereof until the next annual competition. Such Association shall have its name and year of competition engraved thereon.
6. There shall be a "National Committee for USTA Girls' Intersectional Team Championships" appointed by the President of USTA. The National Committee shall make all arrangements for and shall conduct the matches. If the Chairman is unable to be present on any day of the competition, she shall appoint a member of the Committee to serve as acting Chairman of the Committee.
7. The Competition shall be scheduled to begin at least one week before the USTA Girls' 18 National Championships or following the 18 National Championships as scheduled by the National Committee.
8. The Chairman of the National Committee for Girls' Intersectional Team Championships shall be the Referee of the Competition. If she is unable to serve, the Referee shall be appointed by the committee.

9. The matches shall be played on the same type of court surface as that on which the Girls' 18 National Championships is played, except when in the judgment of the Referee, conditions of weather or of courts on the days of play make this inadvisable.
10. No team will be allowed to compete without a chaperone in residence in the dormitory.
11. Each Team Match shall consist of five Singles Matches and two Doubles Matches. The same or different players may be used in Singles and in Doubles. Eight players may be included on each team but all must be included in the line-up, either in Singles or in Doubles.
12. The draw shall be made pursuant to the Tournament Regulations of USTA and teams shall be seeded under the Rules for Seeding the Draw. Notice of the time and place for making the draw shall be given by the Committee to the captain of each of the competing teams who shall be privileged to attend on behalf of her team. The name of each team captain shall be sent to the Chairman of the National Committee for USTA Girls' National Intersectional Team Championship Matches at least one week before the date of the event.
13. At the beginning of the captains' meeting each captain shall furnish the Referee with the names of her singles players in the order in which they will play with one substitution, if desired. The two doubles teams shall be submitted in their correct order. The order for both the singles and doubles shall continue for the duration of the Matches. It shall be considered a point of honor to list the players in the order of their respective abilities at the time. In the event of the disability of any player previously named the Captain of the team may, with the consent of the Referee, play the substitute. In the event of a substitution the players shall move up in order, and the substitute shall play in the No. 5 place.
14. The Referee shall have sole charge of arranging the time at which matches shall start and the courts upon which they shall be played. Umpires and Linesman should be provided by the Section where the Championship is held.
15. One point shall be counted for each singles match and one point for each doubles match. Any default shall count one point for the opposing team. The team winning the majority of the points shall be the winner of the match.
16. All matches shall be played pursuant to the Rules of Lawn Tennis of the United States Lawn Tennis Association.
17. These Regulations may be amended from time to time, as experience dictates, by the National Committee for Girls'

National Intersectional Team Championships, with the approval of the President of USTA.

USTA WOMEN'S NATIONAL COLLEGIATE TENNIS CHAMPIONSHIP

Eligibility requirements for The Women's National Collegiate Championship and all Sectional Championships shall be as follows:

1. Any woman student who is presently enrolled as a full-time undergraduate student in a university, college, or junior college, and is approved by her college as meeting its academic requirements, shall be eligible. An undergraduate student is defined as one who has not received the B.A. degree or its equivalent.
2. A student may participate in a tournament held during the summer provided she was enrolled for the semester or quarter preceding the tournament. (Exception: Seniors graduating any time during the school year prior to the tournament may participate.)
3. Transfer students are immediately eligible for participation following enrollment in the institution.
4. A student may participate no more than four times.
5. Entries shall be limited to four singles players and two doubles teams from each college. Players in doubles may or may not play singles.
6. All participants shall be of amateur standing as defined by USTA.
7. Each participant in the Women's National Collegiate Championship and in all Sectional Championships shall be an invitational member of USTA.
8. All participants shall be certified by the chairman of the Department of Physical Education for Women of their respective institutions.
9. The responsibility for the health status of students shall be assumed by the respective institutions.

Amendments

These USTA Tournament Regulations and Special USTA Championship Regulations shall be subject to alteration, amendment or repeal, and new Regulations not inconsistent with the Constitituion, By-Laws or Standing Orders of this Association may be made by an affirmative vote of a majority of the Executive Committee present and voting at any meeting of the Executive Committee; and during the intervals between meetings of the Executive Committee, by the affirmative vote of a majority of the members of the Management Committee present and voting at any meeting of the Management Committee; provided notice of the proposed alteration, amendment

or repeal be included in the notice of the meeting. A copy of each alteration, amendment or repeal made by the Management Committee to the USTA Tournament Regulations and Special USTA Championship Regulations shall be sent to each member of the Executive Committee and to each Section President who is not a member of the Executive Committee within 30 days after such action.

USTA ENDORSES POINT PENALTIES SYSTEM

The USTA Annual Meeting at Sarasota, Fla. heard reports of successful results in tournaments where the Point Penalty System is announced as being in effect – it being emphasized that often the announcement itself is all that's needed to improve conduct control. This was brought out not only in the meetings of the Scoring and Playing Rules Interpretation Committee and the Umpires Committee, but also on the floor at the open meeting of the USTA Executive Committee.

It was the sense of that meeting that particulars and guidelines of P.P.S. be given a new and wider circulation, and the Executive Committee directed that the procedure be included in the 1976 Yearbook as well as in A Friend At Court. This was the third year in a row that the Executive Committee has given the green light to use of this deterrent to unacceptable court behavior.

Herewith, for your convenience, is "how it works":

"The Chair Umpire shall be the sole judge of *any* such suspension, delay or interference, and after giving *one* warning may, *in his discretion, penalize an offending player by awarding the opponent one or two points per offense,* or disqualify the offender." (New material in italics.)

And (2) this sentence would be added:

"Similarly the Chair Umpire is empowered to deal with instances of unsportsmanlike behavior or misconduct by the awarding of point penalties – generally, but not necessarily, after one warning. This does not rule out a competitor's liability to summary disqualification for a single flagrantly unsportsmanlike act."

Obviously there are infinite degrees in instances of bad behavior, and the Chair is entitled to make penalties commensurate with the seriousness of the offense. (see Guidelines)

A competitor will not have the right to appeal to the Referee from any point or game penalty until after three penalties have been levied by the Umpire.

Note Well: The use of point penalties is the option of the Referee, provided notice is given before the start of the event, the start of a round, or the start of an individual match. (Tournament Regulations 3-i)

The Point Penalties System also provides for penalties of one game for each five minutes or fraction thereof of lateness from the time the match is called and both court and opponent are ready. This does not rule out a player's liability to outright default for unexcused lateness beyond the set deadline.

Nothing in the Point Penalties System rules out the *subsequent* levying of monetary penalties, suspensions, or other disciplinary actions by whatever governing body has jurisdiction. P.P.S. has the function of helping on-the-court officials to fulfill their proper role of ensuring *fair conditions of play*.

In tournament play with no chair umpire, P.P.S. may be invoked by the Referee and penalties levied by him, if on the basis of his first-hand observation.

All umpires are urged to remember: THE OBJECTIVE IS TO DETER, NOT PUNISH.

GUIDELINES – While it is recognized that it would be impractical to prescribe rigidly specified penalties for every conceivable type of degree of misconduct, the USTA Umpires Committee has suggested the following as appropriate:

1. Violations of present provisions of Rule 30:
   First offense – a warning; Second offense – one point; Third and subsequent offenses – one game each, or disqualification. (The following constitute such violations: Taking more than one minute on changeover; toweling off at times other than changeover – except after a fall or cut; prolonging argument over a decision after being directed to resume play – this latter would constitute a second offense.)
2. Failure to commence play after expiration of established warmup period: one point.
3. Lateness in being ready to start a match, court and opponent being available: one game for each five minutes or fraction thereof.

Lateness after an intermission: one point for each minute or fraction thereof.

4. Profane or obscene language or gestures:
   A. Directed at no one in particular: First offense a warning; Second one point; Third and subsequent offenses – one game each.
   B. Directed at an official, opponent or spectator: First offense – one point; second – one game; Third offense disqualification.
5. Minor unsportsmanlike acts, such as knocking a ball out of the enclosure; First offense – a warning; Second and subsequent one point each.

Major unsportsmanlike acts, such as hitting a ball or throwing a racket at or near an official, ball boy or spectator, or intentional

racket-dropping to disconcert opponent: First offense two points; Second – one game; Third disqualification.

RULES OF VASSS 'SINGLE POINT' HANDICAP PLAY
(All USTA rules apply except in scoring)

1. It is scored as at Table Tennis – 1, 2, 3, 4.
2. The serve changes from A to B every 5 pts. (5, 10, 15). This 5 pt. sequence is called a 'Hand'. Serve changes at the end of the set but not side (N-S). The receiver or team in the fifth point in the hand may choose to receive in right or left court.
3. The first point in each 'Hand' (1, 6, 11, 16, etc.) is served into the Right or Forehand Court.
4. Sides (N-S) are changed on the odd 'Hand', 5 pts. (5, 15, 25).
5. The official set is fixed at 31 points. But where time is at a premium, 21 points may be used.
6. If there is no umpire the Server is required to **call score loud and clear** after each point.
7. The winner of the set must lead by at least 2 points (31-29). Maximum number of points 69, playing time 25-30 minutes. **SINGLE POINT IS THE KEY TO EFFICIENT HANDICAPPING.** Sudden death decides winner as 30 points all in single point set.

HANDICAP RULES

The VASSS SINGLE POINT method is used.

Play shall proceed as if the points of the handicap had actually been played.

(a) Handicap 2 Points: Server commences serving Point 3 into Right or Forehand Court. **Service** and **Side** both change after 3 Points (2+3=5).

(b) Handicap 6 Points: Server commences serving Point 7 into the Left or Backhand Court. Service changes after 4 Points (6+4=10). Sides (N-S) are changed after 9 points (6+9=15).

The giver of the handicap shall have the **choice of Service and Side** in the opening Set, choice of Service **only** in subsequent sets. At the conclusion of the set players do not change Sides. (N-S).

TO ESTIMATE HANDICAP POINTS TO BE RECEIVED AT 30-30 IN 9-POINT TIEBREAK

1-3 Points NO POINTS Handicap, 4-7 Points - 1 Point Handicap, 8-14 Points - 2 Point Handicap, 15-21 Points - 3 Point Handicap, 22-30 Points - 4 Point Handicap.

In the 9-Point Tiebreak handicap, points shall be considered as if already played. Examples: 1 point handicap, A shall serve point 2 into Left or Backhand court. 2 point handicap, B shall serve point 3 into Right or Forehand court. (See Tiebreak Diagram).

VASSS RULES FOR SCORING
ROUND ROBIN MEDAL PLAY (RRMP)

A ROUND may be any multiple of 20 (40 - 60 - 80) total points or one 31 Point set is used, the winner shall receive a 5-Point bonus for the win, plus the unplayed Points in the set (e.g.: A wins 31 - 10, his score will be 31+5+20=56 Points).

SERVICE AND SIDES are changed as in 31 Point. See Rules 2, 3, 4, 5.

INDIVIDUAL HANDICAPS are estimated against scratch for the number of points in a round, as decided by the tournament committee.

TOURNAMENT TEAM HANDICAP is the sum of the individual players' handicaps.

IN CASE OF A TIE, follow Tiebreak Rules and Diagram.

IN FIRST-CLASS COMPETITION, ON FAST SURFACES such as grass, where the 'power serve' and 'net rushing' tactics virtually eliminate ground stroke play, IF DESIRED the balance MAY be maintained by the server serving from a line 3 feet back of the baseline, or by allowing only a single serve.

NAGWS OFFICIATING SERVICES

Through its standing committee on Officiating Examinations and Techniques, the National Association for Girls and Women in Sport (NAGWS) provides materials for the training and rating of officials in ten sports to meet the various levels of sports events.

Approximately 200 boards of officials throughout the U.S. are affiliated with NAGWS through an organization called the NAGWS Affiliated Boards of Officials. These boards provide opportunities for interested individuals to learn about officiating or judging and are authorized to give NAGWS ratings.

The Officiating Examinations and Techniques Committee includes the P and T of O (Principles and Techniques of Officiating) Chairpersons. These individuals are specifically concerned with enumerating the mechanics used by referees, umpires, and judges in officiating games, meets or matches.

The Officiating Examinations and Techniques Committee also includes an E and R (Examinations and Ratings) Chairperson for each sport in which ratings are given. Each Chairperson and committee are responsible for preparing, revising, and analyzing the officiating theoretical (written) examinations.

If you have questions concerning the techniques of officiating tennis, write to:

ANN VALENTINE
Brigham Young University
Provo, UT 84601

Information regarding study questions in this *Tennis Guide* or on the theoretical examination on tennis should be addressed to:

ALICE WORKINGER
222 Cooke Hall
University of Minnesota
Minneapolis, MN 55455

If you have questions concerning the techniques of officiating badminton, write to:

MYRNA STEPHENS
Illinois State University
Normal 61761

Information regarding study questions in this *Badminton Guide* or on the theoretical examination on badminton should be addressed to:

DIANE HALES
1421 Niagra
Claremont, CA 91711

Additional information regarding NAGWS Officiating Services may be secured by writing:

NAGWS/AAHPER
1201 Sixteenth St., N.W.
Washington, DC 20036

STATEMENT OF PHILOSOPHY OF THE AFFILIATED BOARDS OF OFFICIALS:

THE ROLE OF THE OFFICIAL IN THE COMPETITIVE SITUATION

Educational values should be of primary concern to all who have leadership roles in a competitive program. As one of those fulfilling leadership roles, the official must be concerned with promoting those values and with the welfare of the participant. The unique contribution of the official is assuring equal opportunity and fair play for all. The official essentially acts as an arbitrator, providing judgments that are within the spirit and intent of the rules. Decisions are based on objective evidence, free from bias and from the emotion that often pervades the competitive environment.

An official enters the competitive situation with a thorough understanding of the letter, as well as the intent of the rules, the strategy and skills of the sport to be played, and correct execution of officiating techniques to view the contest accurately. The official maintains a friendly yet reserved attitude toward all throughout the sport experience. The official is flexible, operating within officiating standards appropriate to the age of the performers, the level of skill, and the facilities available. Biases by players, spectators and coaches will be evaluated with an understanding not only of the multiplicity of ways in which individuals may react to a competitive experience but also of the behavior appropriate to such an educational experience. Duties will be performed fairly, efficiently and without drawing undue attention to the official. In order to strengthen the official's effectiveness, personal evaluation of performance will be made and solicitation of constructive criticism from coaches, players and administrators will be sought. Though receiving a fee, the ultimate reward to the official will be that of having rendered a valuable service to girls and women who have found personal meaning in expressing themselves through the medium of sport.

STANDARDS FOR OFFICIALS RATINGS IN TENNIS AND BADMINTON[1]

There are six ratings for officials, five of which qualify the holder to officiate sports contests. Each is designed to meet the needs of various sports events and to stimulate interest of individuals who desire to officiate.

The *Examiner's rating* signifies the holder is qualified to rate officials.

The *Intramural rating* qualifies the holder to officiate contests in the school in which the holder is enrolled or contests of comparable level.

The *Apprentice rating* qualifies the holder to officiate contests which may be adequately controlled by a competent, but inexperienced official.

The *Local rating* signifies that the holder is qualified to officiate interscholastic and intercollegiate contests requiring a competent and experienced official.

The *State rating* signifies that the holder is capable of officiating any contest within the state or region where the rating is awarded.

The *National rating* signifies that the holder is capable of officiating any contest anywhere in the United States. This rating is for the most highly skilled official.

Specific requirements for all ratings are outlined below.

Examiner

1. Prerequisite – must have held a state or national rating for a minimum period of six years. (The six years need not be consecutive but must be within the previous eight-year period.)
2. Theoretical examination – national examination, minimum 82.
3. Duration – two years from next June 1.
4. Renewal:
   a. In order to be eligible for renewal, the candidate must have been involved in the rating or training of officials.
   b. To renew, the candidate must pass the national theoretical examination with a minimum score of 82.
   c. Should the rating lapse for one year or less, the candidate remains eligible for renewal.
   d. Should the ratings lapse for more than one year, the candidate must qualify through earning a State rating.
5. This rating is transferable to other Boards.

[1] Note the current *NAGWS Basketball Guide* for information regarding ratings in all sports and for the most updated information about Affiliated Boards of Officials standards and practices.

Intramural Official

1. Minimum standards – set by Affiliated Board.
2. Duration – two years from next June 1.

Apprentice Official

1. Minimum standards can be set by the affiliated board, *or* these standards may be followed:
   a. Minimum grades – average of theory and practical, 75.
   b. Theoretical examination – national examination, minimum 74.
   c. Practical examination[2] – minimum 75; minimum number of raters: one.
2. Duration – Two years from next June 1.

Local Official

1. Minimum grades – average of theory and practical, 80.
2. Theoretical examination – national examination, minimum 76.
3. Practical examination[2] – minimum 80; minimum number of raters: two.
4. Duration – two years from next June 1.
5. This rating is transferable to other Boards.

State Official

1. **Minimum grades – average of theory and practical, 85.**
2. **Theoretical examination – national examination, minimum 82.**
3. Practical examination[2] – minimum 85; minimum number of raters: three.
4. Duration – two years from next June 1.
5. This rating is transferable to other Boards.

National Official

1. Minimum grades – average of theory and practical, 88.
2. Theoretical examination – national examination, minimum 88.
3. Practical examination[2] – minimum, 88; minimum number of raters: three, one of whom must hold a National rating.
4. Duration – two years from next June 1.
5. This rating is transferable to other Boards.

[2] Persons holding a State, National, Honorary National, or Examiner's rating are qualified to rate. Any rating team may include no more than one Examiner.

Recommended Fees[3]

Local boards should establish minimum fees that reflect the level of rating of the official as well as the type and level of competition within their locale. Boards are encouraged to establish fees in conjunction with local governing groups. The fee schedule should reflect differential pay based upon rating levels.

Registration of Officials

A number of states require those who officiate either boys' or girls' interscholastic contests to be registered with the State High School Athletic Association or other administrative body. Holding a NAGWS rating ordinarily does not exempt an official from complying with this regulation.

All NAGWS officials who officiate any high school or junior high school games are urged to cooperate fully with their state regulatory body by registering with the proper organization and paying any required fee, by wearing the official emblem in addition to the NAGWS emblem, and by complying with all requirements for sports officials.

Amateur Standing of Officials[4]

An official who wishes to maintain amateur status as a participant in a sport must be aware of the ruling(s) on amateur status established by the governing body for that sport.

Amateur status may be defined by groups governing high school and college level competition. National organizations governing amateur competition may also have established rulings on the amateur status of the participant.

The official who wishes to maintain amateur status as a participant is responsible for investigating the specific regulations of the governing body with jurisdiction over such eligibility.

How To Become A Rated Official

1. Study the rules, the article on the techniques of officiating, and the study questions.

[3] Based on the NAGWS position advocating equal opportunity for all individuals and equal pay for equal service, the Affiliated Boards of Officials Executive Council voted to delete recommended fee schedules (March, 1975). As fees received by various boards throughout the nation differ from one another and from other officiating associations, problems existed in recommending minimums that were fair and equitable for all.

[4] For more complete details, see JOPHER 39:24-27, October 1968.

2. Attend interpretation meetings and officiating clinics or training courses conducted in your vicinity.
3. Practice often. To some, officiating comes easily; to others it comes only as the result of hard work and concentration. Welcome criticism and work hard to improve.
4. Find out from the chairperson of the nearest affiliated or provisional board when examinations for ratings are to be held. (Consult list of boards in NAGWS Directory available from: NAGWS/AAHPER, 1201 Sixteenth St., N.W., Washington, DC 20036, $3.00).
5. Contact the chairperson of the nearest affiliated or provisional board for materials necessary to give Intramural ratings.
6. Remember that it is the aim of the Affiliated Boards of Officials to maintain a high standard for officials. Do not be discouraged if you do not receive the highest rating on your first attempt. Welcome suggestions from the examiners, practice more and try again.

Information For Affiliated And Provisional Boards

An *affiliated* board is authorized to give ratings at all levels in that sport.

A *provisional* board is a board which has at least three Apprentice officials in a given sport; it is authorized to give ratings at the Intramural and Apprentice levels in that sport.

Exceptions: When rating films are used as a medium for the practical rating (synchronized swimming and gymnastics), boards may award ratings at any level.

An Officiating Board may have *affiliated* status in one or more sports and/or *provisional* status in one or more sports. When a Board has *affiliated* or *provisional* status in a sport and wishes to have affiliated and/or provisional status in another sport, that board should write the Examinations and Rating (E.&R.) Chairperson of the respective sport. The board should indicate the names of a minimum of three persons qualified to act as examiners in that sport for the next two years. Qualifications and experience in the sport should be listed for each examiner.

Note: For basketball and volleyball an examining committee of three persons holding State, National, Honorary National or Examiner's ratings is required. No specific number of rated officials is needed to initiate ratings in Badminton, Gymnastics, Softball, Swimming, Synchronized Swimming, Tennis, and Track and Field.

If, after two years, a board does not have three State officials in a sport, the board loses its affiliated status for giving ratings in that sport. (Exceptions: gymnastics and synchronized swimming.) The board may then request provisional status in that sport from the E.&R. Sports Chairperson. If granted, the board may continue to exist with provisional status and award only Apprentice and Intramural ratings. To continue as a provisional board after two years the board must have a minimum of three officials with at least an Apprentice rating in each sport concerned.

Examination packets are mailed to qualified boards on:

August 1 – Volleyball and Basketball
September 15 – Competitive Swimming and Diving, Badminton, Tennis
October 1 – Fencing
October 15 – Synchronized Swimming, Gymnastics
February 1 – Softball and Track and Field.

Emblem and Uniform

The official shirt for tennis and badminton is a navy blue and white striped tailored shirt or a navy blue and white striped jersey. A navy blue skirt, shorts or slacks, appropriate to the situation should be worn with the shirt; white may be substituted for the navy blue. Officials who receive fees for officiating are required to wear the official shirt.

The official shirts and emblems are available from The Hanold Company, Sebago Lake, Maine 04075. The company can also provide blazers. When ordering, send clothing size and check or money order for correct amount. Anyone may order the official shirt. A current rating card must accompany an individual's order for an emblem; however, it is not necessary to send a rating card when ordering a shirt.

An affiliated board may wish to have a supply of shirts or emblems for distribution to newly rated officials. A quantity order may be placed *only* by the affiliated board chairperson. It is not necessary that chairperson's rating card be enclosed, but full payment must accompany the order.

Prices: Wash-and-wear shirt, $7.00; knit jersey with zipper neck, $10.50; navy flannel blazer, $35.00; National State, Local, Apprentice, and Intramural emblems, $1.75. (All prices are subject to change.)

Shipping Charge: 75 cents per order.

How To Establish A Board of Officials

1. Establish the need for an affiliated board by contacting individuals in the area who have current ratings or who are interested in standardizing and raising the level of officiating badminton, basketball, competitive swimming and diving, fencing, gymnastics, softball, synchronized swimming, tennis, track and field, or volleyball in that area.
2. Write to Jan Boyungs, Secretary of the NAGWS Affiliated Boards of Officials, Central Washington State College, Ellensburg, WA 98926, for a sample copy of an authorized constitution for officials' boards and the *Policies and Procedures Handbook* and application for becoming an affiliated board.
3. At a designated meeting of interested individuals, present plans for forming a board.
   a. Choose a name which will permit expansion of function as need may arise; do not limit title to one sport.
   b. From the group, elect a chairperson, chairperson-elect, secretary, and treasurer.
   c. Form an examining committee of at least three members. If any member has been rated elsewhere, such experience should be helpful; such a rating is not necessary, however, except in basketball and volleyball. (See 4 below.) It is suggested that members of the examining committee be examined and obtain ratings from other affiliated boards whenever possible.
   d. Make plans for drawing up a constitution according to the sample copy received from the Secretary of the NAGWS Affiliated Boards of Officials. Plan to devote some time to the study of the rules and to practice officiating. If possible, secure the assistance of some rated official in each sport for which the Board anticipates giving ratings.
4. Send the completed application form, two copies of the local constitution, and a check for $5 annual dues (made payable to the NAGWS Affiliated Boards of Officials), to the appropriate person indicated by the Secretary. If *basketball* or *volleyball* ratings are to be given, an affiliated board must send a list of three persons holding a State, National, Honorary National, or Examiner rating, and a provisional board must send a list of three persons, one of whom must hold at least a State rating. (Include photostatic copies of current rating cards.) A list of three interested individuals must be sent if the board wishes to give ratings in sports other than basketball or volleyball. If, at the end of two years, a board wishes continued affiliated status in any sport, it will be required to have a minimum of three persons with State, National, Honorary National, or Examiner ratings. (Exception:

Gymnastics and Synchronized Swimming.) For continued provisional status, a board will be required to have a minimum of three officials with at least an Apprentice rating. Approval of the application will come from the Past Chairperson of the Affiliated Boards of Officials who will request that examination packets be sent to your Affiliated Board Chairperson for all sports in which your Board is authorized to give ratings. The process of accepting an application for affiliation of a new Board and of requesting that the proper examination packets be sent ordinarily takes several weeks. Prospective Boards, therefore, should file for affiliation at least a month before they wish to hold rating sessions.

5. Administer Form A of the National Theoretical Examination. Form B of the National Theoretical Examination may be administered to those who did not pass Form A. The Intramural Examination may only be given to those candidates pursuing Intramural or Apprentice ratings. Once the Intramural Examination has been administered, the candidate forfeits the option to take either Form A or Form B.
6. To cover expenses involved in the construction and evaluation of written examinations, boards should charge a fee each time an individual takes a written examination. The Affiliated Boards of Officials Treasurer must receive 50 cents for each written examination given by a board. Board fees can exceed 50 cents per test in order to cover operating expenses.
7. Conduct practice sessions in rating officials. All persons on the examining committee who have not previously rated officials should have a minimum of three practice sessions prior to actually rating. Secure the assistance of a rated official in these practice sessions if at all possible.
8. Give practical examinations to individuals who pass the written examination. (Note minimum number of raters required to give various ratings on page 145.)
9. Request appropriate rating cards from the NAGWS National Office for distribution to those who pass the theoretical and practical examination.
10. Send lists of approved officials to schools and other organizations in the area. This notice should indicate the fees for officiating and should give the name, address, rating, and telephone number of each official.
11. Keep accurate lists of all persons receiving ratings. Forward these lists to the chairpersons of the Examinations and Ratings Committees in those sports in which your board was authorized to give ratings.

For additional information about Affiliated Boards of Officials, write to:

ABO CHAIRPERSON
% NAGWS
1201 Sixteenth St., N.W.
Washington, DC 20036

NAGWS BADMINTON GUIDE COMMITTEE*
1974-1976

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*The current *Guide* was prepared by the 1974-76 Committee; the 1978-80 *Guide* will be prepared by the 1976-78 Committee.

Badminton Contest Ethics

ARLENE H. SMITH

Arlene H. Smith received her B.A. degree from the University of Redlands, Redlands, CA, her M.A. degree from California State University, Los Angeles, and an Athletic Trainer Certificate of Completion. At California State University, Hayward, she is associate professor of kinesiology and physical education and coaches the intercollegiate coed badminton team. She has been director of numerous badminton teaching clinics in the Northwest and has served twice as NCIAC badminton commissioner.

Each sport has its own personality out of which grows its moral code of behavior. These are courtesies which should be observed whether playing one game, a match, a tournament, or practicing. In some instances the formality or informality of the match to be played may dictate which of these are observed. These unwritten laws of badminton are an essential part of the sport; they are the contest ethics.

1. If any players on a court are unacquainted with the others, introductions are in order.
2. Players should warm up with clears and then provide an opportunity for each other to practice any shots they desire before starting a match.
3. Clean white comfortable clothing is the standard dress for participants in all matches.
4. Always play your best: careless play is an insult to your opponent.
5. After the completion of a rally, players should return the shuttle politely and directly to the opponent with a controlled stroke.
6. The server should ascertain whether her opponent is ready for the service and wait until she is ready before serving. The receiver should not take undue time before each service.
7. When there is no umpire, the server calls the score before each service.
8. If a spectator interferes with a rally, the point should be replayed.
9. Players wait until the current rally is terminated before attempting to recover a shuttle which has fallen on or near an adjacent court.
10. The losers of a match should be the first to congratulate the winners. The winners thank the opponents for the match.

11. Each player assumes the responsibility of calling her own illegal shots. A player may also call an illegal shot on her partner, but under no circumstances does she call such shots on her opponent.
12. A player should always let the shuttle drop to the floor if she believes it to be out. A player should not catch a shuttle and call it out.
13. A player should never voice expression or allow her emotions to get out of control, whether it be over a loss or win of a point, game or match.
14. Praise or applause should be saved for good shots. One does not applaud because an opponent has made a poor shot.
15. Quiet should be maintained by players and spectators while the shuttle is in play—most players like to concentrate while playing.
16. The decisions of the official in charge of the match should be considered final. All decisions should be accepted gracefully without delaying the game. Officials should be thanked at the conclusion of the match.
17. If there is no official, a player should accept her opponent's decision for her side of the court and replay any truly questionable issues.
18. An occasional complimentary remark such as "good shot" on your opponent's winning stroke is always acceptable.
19. Extend to your partner the same courtesies and considerations you expect returned to you.
20. In a situation where there are people waiting to use the courts, play one match and then vacate the court.

J. Frank Devlin, A Living Legend

JOAN WEYERS

Joan Weyers received her bachelor of science degree from LaCrosse State University in Wisconsin, master in education degree from the University of North Carolina, Greensboro, and Certificate of Advanced Study from Johns Hopkins University, Baltimore.

A sprightly, lean gentleman with snow white hair walks lightly and belies his years. This grandfatherly look belongs to J. Frank Devlin, premier badminton teacher in the world. A native of Dublin, Ireland, Frank Devlin has an impressive playing record. He won the All England All-Comers (World) Championship in singles between 1925-1929 before leaving competition with osteomyelitis that affected his right arm. Upon his return in 1931, Devlin reclaimed the singles and doubles titles. He has won the World Doubles Championship 7 times and the World Mixed Doubles Championship 5 times. Devlin's singles record of 5 consecutive wins has been equalled only by his daughter, Judy Devlin Hashman, who is 10 times world singles champion and 12 times United States Singles Champion.

After the 1931 All England Championships, Frank Devlin turned professional and coached at the Winnipeg Winter Club for seven years. The next year he was invited to conduct a world coaching and lecture tour which took him to New Zealand, Australia, Tasmania, Malaysia and Singapore.

Following the tour Devlin played an exhibition in New York City where he decided to stay as a teaching professional at the 7th Regiment Armory. He coached, taught and lectured in New England, New York State, New Jersey and Maryland. In 1937 he accepted a position as badminton professional in the private clubs and schools of Baltimore. There he organized the city's first Saturday morning classes which produced 10 years of junior girl national champions. From this position he and Raymond Scarlett started the first National Junior Tournament which was won by his pupil, Barbara Scarlett; in 1947 the team of Barbara Scarlett and Susan Devlin Peard won the first national junior 18 and under doubles Championship.

Frank Devlin's name is continually in the forefront of the international scene. Every three years the United States and

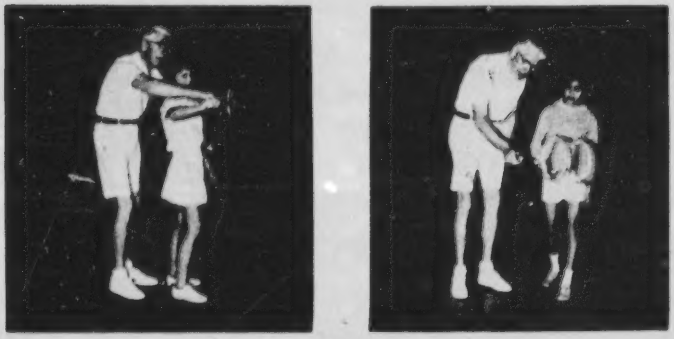
Note: The author obtained information for this article from a personal interview with J. F. Devlin.

Canadian teams compete in a seven-event match vying for the Devlin Cup. The match consists of two ladies' singles, two men's singles, one men's doubles, one ladies' doubles, and one mixed doubles.

A major annual badminton event in Baltimore is the Mason-Dixon Tournament, which attracts top players from all over the United States. At this tournament the Devlin trophies are awarded to the men's and ladies' singles champions.

The best known of Frank Devlin's published works is the *Sports Illustrated Book of Badminton.* He has also written two paperbacks and numerous instructional articles in newspapers and periodicals.

He is currently semi-retired and lives with his wife in Owings Mills, Maryland, a suburb of Baltimore. He continues his enthusiastic teaching and coaching of youngsters and adults, and regularly attends the tournaments in which his pupils compete. The lively J. Frank Devlin is truly a sports legend.



J. Frank Devlin and pupils.

Conditioning Tips for the Badminton Arm

SHERAN L. BENERTH

Sheran Benerth received her bachelor's degree from Eastern Illinois University, Charleston, IL, and her master's degree from Northern Colorado University, Greeley, CO. She is physical education department head at Ben Eielson High School, Eielson AFB, Alaska. She has been a four-time state badminton finalist, and is currently coaching the Alaska State team in international competition. Sheran has served as the Alaska DGWS (now NAGWS) badminton chairman, and has served two terms on the National Committee.

With the expansion of the popularity of badminton, it is not uncommon to find that those players who reach the finals in many tournaments will often have played as many as a dozen or more matches. Because of tight schedules numerous games may have to have been played in one day, resulting in a match of endurance.

During the beginning of each sports season participants are faced with problems of injury prevention and treatment relating to the event in which they are participating. Many preseason conditioning practices and exercise routines deal with the overall development of cardiovascular efficiency. However, few exercises deal with the specific conditioning of the muscles of the arm and shoulder.

Sore arms and pulled muscles are therefore becoming more of a concern to badminton players and coaches. Some players may even have to sit out part of their schedule because of injuries to the arm and shoulder. Such injuries are easily prevented through a little time spent in pre- or off-season conditioning.

One of the biggest keys to success in development of the racket arm is to focus attention towards the extensors, particularly the triceps muscles. The importance of the extension phase of the forearm in badminton can be appreciated readily by studying the smash. The Tripod Pushup (Figure 1) when done regularly will prove to be one of the best means of developing and maintaining the triceps for full range of motion.

The tripod pushup is executed by placing the hands approximately 5 hand spands in front of the feet and forming a triangle with the fingertips and thumbs. The nose or top of the head is lowered into the triangle. Raise or push the body as far up as possible. Hold briefly, then return to the starting position. Repeat according to predetermined goal relative to the individuals' capabilities.

The great weight training boom in the 1950s and 1960s has evolved into more practical, less expensive means of attaining even

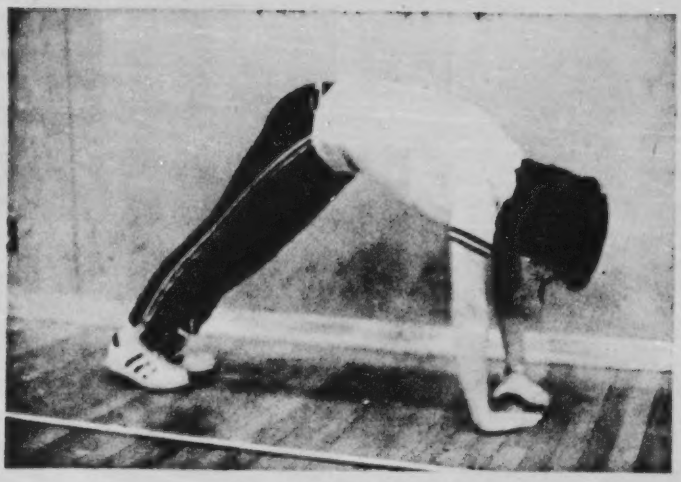


Figure 1. Tripod Pushup.

better and more specific results. The value of stretching type exercises are only now being recognized in relation to noncontact sports such as badminton. Research has indicated that there is less chance of joint and associated muscle injury where joints and muscles have previously undergone stretching movements. A simple but effective exercise is to grasp a chin-up bar and hang with full body weight suspended for 30 seconds to one minute. The exercise is particularly important the day after a long practice session or tournament play.

An exercise of wide repute for strengthening the wrist and forearm of a player is the squeezing of a tennis ball. Count to 10, release and repeat up to 30 times daily. Another simple isometric for the forearm extensors is to hold the arm out at full length parallel to the ground, palm down. Lift the wrist and fingers as high as they will go. Hold 30 seconds while the muscles tighten and release.

Despite controversy between advocates of isometric and isotonic exercises, both agree that a variety of exercises stressing different angles and full range of motion are of prime importance. The following exercises are emphasized because they fulfill this need.

In performing these exercises, use an old tennis racket or broomstick cut to the length of a racket. A doorway may be used for full range of shot simulations, and a chinning bar may be used to

add another station for overhead shot simulations. These exercises should be done *once* each day.

Figure 2. Forehand.

Position: Stand in a doorway assuming the stance of a forehand swing. Place the face of the racket against the side of the doorway at a point where the racket would normally come in contact with the shuttlecock in a typical forehand swing.

Contraction: Inhale. Holding the wrist firm, press the racket against the side of the doorway using the shoulder and arm muscles. Increase pressure for 4 seconds until a maximum effort is reached. Hold at maximum effort for 6 seconds. Relax and exhale.

Figure 3. Backhand.

Position: Stand in the doorway or under the chinning bar assuming a backhand stance in exactly the same position as the instant the racket would come in contact with the shuttlecock. At this point the racket should be in contact with the immovable object.

Contraction: Inhale. Holding the wrist firm, press the racket against the object. Increase the pressure for 4 seconds until maximum effort is reached. Hold at maximum effort for 6 seconds. Relax and exhale.

Figure 4. Smash.

Position: Stand in the doorway or under the chinning bar with the racket in play grip. Place the face of the racket against the immovable object while assuming a normal stance for the smash.

Contraction: Inhale. Holding the wrist firm, press the racket against the object increasing the pressure for 4 seconds until maximum effort is reached. Hold at maximum effort for 6 seconds. Relax and exhale.

The following exercises are designed for rehabilitation and strengthening of the racket arm; however, they should be practiced with both arms. They utilize a 2½ pound dumbbell weight available in most schools. These exercises should be repeated on a daily basis.

Figure 5. The Circle Swing.

Position: Place the left hand on the left knee and bend forward at the waist. The feet should be shoulder width apart. Grasp the weight in the right hand with the arm hanging loosely in front of the body.

Motion: Swing the weight, making a circle in a clockwise direction for 10 circles. Reverse, making 10 circles in a counterclockwise direction. Repeat, going slower for 5 times in both directions. Repeat the exercise with the left arm.

Figure 6. Lateral Swing Side To Side.

Position: Stand with the feet shoulder width apart. Place the left hand on the left knee and bend forward at the waist. Grasp the weight in the right hand with the arm hanging loosely in front of the body.

Motion: Swing the weight across the chest to the left and back up to the right, letting the weight carry the arm. Repeat 10 to 15 lateral swings from side to side. Repeat, raising the weight very slowly 5 times. Repeat the exercise with the left arm.

Figure 7. Biceps and Wrist Stretch and Strengthening.

Figure 8. Biceps and Wrist Stretch and Strengthening.

Position: Stand straight with shoulders level, feet spread shoulder width apart. Raise the right arm to shoulder level with the palm up. The left hand is placed under the right upper arm to help hold the shoulder and upper arm level.

Motion: Grasp the weight in the right hand and slowly bend the wrist upward and downward, getting a good stretch. Slowly bend the elbow upward and downward. Next slowly rotate the forearm inward and then outward making sure to get a good stretch. Repeat each exercise for the wrist, elbow and forearm 5 times. Repeat the same exercise using the left arm.

Figure 9. Shoulder Rotation.

Figure 10. Shoulder Rotation.

Position: Stand straight with the shoulders level, feet spread shoulder width apart. Bend the elbow at 90° and raise the arm to shoulder level. Grasp the weight in the right hand.

Motion: Slowly rotate the shoulder back as in the approach to the smash or overhead clear. Get a good stretch of the shoulder. Slowly rotate the shoulder forward, bending the wrist forward. Keep the elbow at shoulder level to get a good stretch. Repeat 5 times, then repeat with the left arm. The exercise may also be done on a bench or table.

Badminton is becoming a specialized sport with unique problems and training practices. Paying special attention to the muscles of the arm and shoulder girdle should help eliminate the possibility of strains and sprains which are a constant threat to the athlete.

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Badminton — Golf

PAULA WELCH

Paula Welch has coached interscholastic badminton in Florida and has conducted badminton clinics in Kentucky. She received her B.S. degree from Florida State University, Tallahassee, and her M.A. degree from George Peabody College for Teachers, Nashville, TN. She is a physical education instructor at Eastern Kentucky University, Richmond.

Badminton-golf is an activity that incorporates some characteristics of golf with a variety of badminton strokes. The variation provides challenge for the skilled player and enjoyment for the beginner. Large as well as small groups can be accommodated in an area approximately the size of a basketball court.

Object of the Activity

The object of badminton-golf is to stroke the shuttle through nine hula hoop targets in as few attempts as possible. Specific strokes designated at each target provide challenge for more experienced badminton players.

Equipment and Organization

One or two rackets and shuttles may be distributed among small groups, or each participant can use a racket and shuttle. Nine hula hoop targets are set up throughout the area to allow sufficient room to tee off. The instructor can determine the tee off distance on the basis of the participant's skill.

Hoop targets may be taped vertically to net standards. The bottom of a hoop should not be lower than net height. Attaching hoops to walls and placing some on courts for serving targets adds to stroke variety. In addition, varying the height of hoops at each hole changes the stroke requirement.

Small groups begin at different hoops on the course. Each player can score, or a group scorer may be selected. The player having the lowest score on each target strokes first on the next tee. Each stroke counts one; however, a swing and miss does not count as an attempt. Par may be established and a limit of five attempts will avoid delay and possible discouragement. A shuttle passing through or hitting a hoop ends an individual's play at each hole. The self toss in which the player stands the shuttle on the racket, tosses the shuttle into the air and strokes, is a good technique for putting the shuttle into play unless the serve is used.

Three Points

NATASHA FIFE

Natasha Fife received her bachelor of science degree at Texas Women's University, Denton, and her master of science degree at Wichita State University, Wichita, KS, where she is an assistant professor of physical education.

A winning game of badminton occurs only if the player or players execute skill and strategy while playing. There are several points that, if practiced, will help develop the skill and strategy necessary to outplay and outthink the opponent.

One point demands that each player execute a good ready position. No player should be found standing still on the court. The quick ready position results from the ready position of the "rackets up" stance. This implies that the racket should always be up in front of the face rather than below the chest. The "rackets up" stance also encourages the players to contact the shuttle before it has fallen below the head and immediately after it has crossed the net. A must in badminton is to hit the shuttle as soon as it has crossed the net. Advanced players will develop the skill of mixing quick hits with delayed hits to manipulate the opponent in her court position.

A second point stresses good footwork. The left side should always be toward the net. Players should be drilled to hit one deep in the left or right corner followed by a net stroke. If both sides are given enough practice in this movement, quick and fast footwork becomes habitual. When receiving a serve, the left side should be toward the net and protecting the backhand stroke. Such a stance does not imply that the beginner should avoid using the backhand but serves as a reminder that anything over the left shoulder is out of the service court. In the receiving position it is important that the player be alert and ready to return the shuttle as soon as it has crossed the net. The receiver cannot wait and watch the result of her return. She must be taught to move back into the base position as soon as she returns the shuttle.

The two previous points result in the third point of winning badminton. Every player should be taught to anticipate the possible return the type of stroke and the area open. A drop shot will generally be returned with a crosscourt drop shot and a short high clear will be returned generally with a smash. However, this does not always hold true because some players can foresee that the expected return will be either the drop or the smash and then use the deep clear from the net or the short drop shot from the smash. If the player knows the possible returns for specific situations she will be able to adapt to any situation.

Beginning Strategy

ROSINE LEMON

Rosine Lemon received her bachelor of science degree from Columbia University in 1970. She won the Junior Girls Doubles in 1954 and the U.S. National Ladies Doubles in 1957. She was a member of the U.S. Uber Cup Team in 1966, 1969, 1972 and 1975. Mother of two children, she works with her husband as a designer and photographer and resides in New York City.

Starting to play badminton is easy compared to other racket sports. The ability to follow the flight of the shuttle and hit it is soon achieved. Next the beginner gains control of her strokes and learns to hit away from, rather than at, her opponent. All these elementary steps are necessary, but when the player comes up against better competition or plays doubles, the court openings are not as obvious and she must employ other tactics. At this stage a player needs strategic goals so that her developing stroke control can be put to work in game situations. A player should learn that each shot in badminton is played with a specific objective in mind. She should realize why clears should be deep, smashes steep and drop shots accurate so she can, with practice, progress to competition and tournament play.

Serve

Objective: To put the shuttle in play

Common Faults: Outright errors on service

Although the serve is not difficult, many unnecessary errors are made because the server does not concentrate. During the service the shuttle is not in flight, there is no need to hurry. Regard the service as an opportunity to score. Every rally starts with a serve and if one cannot serve, a point will never be won.

Execution:

Decide where you will serve. Do not change your mind midstroke. Stand with the left foot forward (for right-handed players). The right arm swings naturally from the shoulder with the elbow straight but not rigid, and the wrist is cocked. Try to feel the arc of the swing and use it for every serve. The point of contact should be well in front of the server but below the waist. Avoid reaching out to the side during the service.

The low serve is used mainly in *doubles.* To control the trajectory of the low serve, make adjustments by bending the wrist more or less rather than by bending the arm or changing the swing. To control

direction sideways, change the angle of follow-through. For a high serve, use a flick of the wrist at impact. By keeping the service stroke the same, the beginner develops needed consistency and does not give information to her opponent by changing body or racket position.

In *singles*, depth and height are more important than disguise. To achieve depth and height, a fuller backswing is used to make the shuttle travel high over the receiver's head and fall perpendicularly near the back line. A high, steeply-falling serve forces the opponent to run to the back of her court to strike the return while coping with the more difficult timing required to hit a shuttle that is falling straight down.

Service Return

Objective: To return the serve safely and gain the offense

Common Faults: Errors made on easy shots

As with serves, too many players through lack of concentration give away points by returning the serve into the net or out of the court. Do not give your opponent a point she has not earned. Do not gamble on a difficult shot. Learn safe but effective service returns for each type of service.

Execution:

The key to returning the service is to reach the shuttle as soon as possible. Watch your opponent's execution carefully for clues to determine the direction of the shuttle.

In *singles* the serve will usually be high and deep. Move back quickly to put your weight into the stroke and continue forward to center-court position. In the beginning you should learn one long and one short return. A good choice might be to learn a straight clear and a crosscourt drop. Practice these for consistency. You will gain more from two accurate strokes than from many haphazard ones.

In *doubles* a low serve is more frequent. It also travels a shorter distance than a high serve and hence arrives more quickly. For this reason it is harder to hit early. Spring forward to meet the low serve at tape level. Do not wait for it to come to you. The higher in its flight you intercept the shuttle, the easier it is to avoid errors and hit a forcing shot. Try to hit the shuttle down so it lands just beyond the service line (a half-court shot), drop it over the net (a net shot), or push it deep to the corners. Avoid hitting up to the middle of the court. Again, choose a few returns you prefer and practice these. Variety can be added later.

Smash

Objective: To win the point or force a weak reply

Common Faults: Smashing when out of position

Hit a smash when you are in good court position and can reach any smash return. The smash travels fast and consequently it comes back to you quickly. If you smash when off balance or from the extreme sides of the court you might win the rally with your smash, but more likely the opponent will drive or block your smash into open court for a winner.

Execution:

Develop a sense of position in the court relative to your opponent. In *singles,* smash when the opponent is out of position or has hit a weak (short) clear. In *doubles* you can smash more freely since you have a partner to help cover the return, but since you also have two opponents it will be harder to hit a direct winner. Try to force a weak return. Hit down the middle to create confusion. Hit into a player's right shoulder so she cannot swing freely. Remember, accuracy and angle are more important than speed. A smash that is angled down steeply will come back up shorter and slower than a flat, hard-hit smash.

Clear

Objective: To push the opponent deep in the court and give yourself time to regain position

Common Faults: Insufficient depth

Good depth (within a foot of the back line) is one of the hardest points to judge for yourself, but for a singles player it is the most crucial factor in the game. A short clear is a weak shot; a deep one an attacking shot.

Execution:

In *singles,* practice until you can sense the stroke you need to achieve good depth. If your opponent is smashing or dropping for winners, your clear is probably short. Realize also that the trajectory of a clear is important. Hit flat clears when you want to rush your opponent, high ones when you want to give yourself time to regain position. In *doubles,* clears are used less but there are many times when a high, deep clear or underhand lift will give you and your partner time to get out of trouble.

Drops (Overhead strokes landing near the net)

Objective: To force the opponent to hit up

Common Faults: Landing too deep in court (singles) and arriving too high above the net (doubles)

In *singles,* your drop should land in front of the service line as counterpoint to your clear which lands near the back line. Force your opponent to run full court to reach the shuttle. Since your opponent must position herself mid-court, you can afford to give

your drop a looping trajectory to make it fall just over the net. In *doubles*, the emphasis is different. Since one opponent may be standing near the net, the landing point of your drop is less important than making your drop arrive low over the net so that the opponent cannot smash it away.

Execution:

Remember the objective in both singles and doubles is to make your opponent hit up. To achieve this you must disguise your drop shot to prevent your opponent from moving towards the net too soon. Learn to hit the drop with the same basic swing used for smashes and clears, but at the last moment, use your wrist to bring the racket head over the shuttle. The result should be a crisp shot which travels quickly but fades once it crosses the net. As you gain control you can vary your stroke to produce either a singles drop which arcs up and falls just over the net or the doubles drop which is hit downwards, skims the net and falls near the service line.

Net Shots (Underhand shots made near the net)

Objective: To make the opponent hit up

Common Faults: Allowing the shuttle to fall low before striking

Execution:

Reach forward to meet the shuttle at tape level. Direct the shot with your wrist, not your arm. If you reach the shuttle early you need only dump it down on the other side of the net. If you hit from below the tape you will have to compensate with a more accurate, and hence difficult, shot. If the shuttle is far below tape level, you would be better off not trying to drop. Lift the bird high and deep and get back in position.

Summary

Beginners as well as more experienced players can benefit from basic strategy. In summary, each stroke should be executed with a specific objective in mind. Awareness of one's position on the court in relation to the opponent is important in stroke selection and execution. Observation of the opponent is essential to detect the direction of the shuttle. Moving to the shuttle rather than waiting for the shuttle reduces errors and rushes the opponent. Badminton can be played at many levels of skill, but an understanding of strategy will help the player coordinate her stroke practice with specific tactical objectives, which, in turn, will help her gain control of game situations.

Strategy in Doubles Play

JOYCE JONES

Joyce Jones has performed in exhibitions at professional basketball games and at half-times of college games. She has held every Seattle City and Washington State Closed title in singles, doubles and mixed at least once, and some several times. Joyce has held the Oregon State and British Columbia titles in doubles and mixed.

For the Beginner

There are certain basic rules of play which everyone should observe just as there are certain rules in contract bridge which will enable every player to team up with any other player and to have an enjoyable game and a fifty-fifty chance of winning.

1. The serve should be low and to the T (where the center line and the service line meet at the center of the court) 99 percent of the time.
2. The server should follow in on her low serve and take over on return of all net shots and put-aways.
3. The server's partner should straddle the center line fairly close to her partner so she can be ready to return all shots except net shots.
4. The return of all shots should be in a downward direction if at all possible. Never lift the bird in doubles unless absolutely necessary.
5. There are two basic directions of the flight of the bird in relation to court boundaries: straight ahead (down the line) and crosscourt.
6. Start play by making the majority of shots down the line.
7. Returning the serve with a crosscourt usually leaves an unguarded spot on your court which the opponent finds easily.
8. Being on the offensive should result in winning points.
9. Being on the offensive means hitting hard and fast and down!
10. Returning shots in an upward direction means being on the defensive.
11. Partners should try to align themselves in an "up and back" position only when the bird is being hit downward; the majority of points should be made by the player at the net.
12. Partners should assist each other by calls on line and out shots.

For the Advanced Player

In addition to the above basic rules, advanced players work more as established teams.

1. Make occasional use of the flick serve, especially when the receiver tends to rush your low serve.
2. Hold the return shot a trifle longer to try to make your opponent commit himself in one direction, and then send a return to the spot he moved from.
3. Make much use of the strong, flat drive return down the line or crosscourt, but be sure it is strong and flat.
4. There should be no question as to which partner is to take the shots that are down the center, but if there is, one partner should call for the shot. It is permissible to talk to your partner when the bird is on your court but not when it is on the other side of the net, as this can be construed as distraction.
5. Make use of body fake in returning half court and drive shots, but this will have to acquired with much practice so as not to fake your partner or yourself out of position.
6. In setups at the net, it is sometimes advisable to rush in as if to "kill" the shot but instead to play a soft dump just over the net and thus, rock your opponent.
7. Most players have trouble returning shots which are aimed directly at their body, so make use of this fact when smashing the bird.

To play good doubles, a player must learn the rules and strategy of the game.

Badminton Doubles Service Strategy and the Backhand Serve

DONALD C. PAUP

Donald C. Paup received his B.A. degree from Occidental College, Los Angeles, in 1961 and his Ph.D. degree from Tulane University, New Orleans, in 1970. He is currently associate professor of human kinetics and leisure studies at George Washington University in Washington, D.C. Dr. Paup was U.S. National Men's Doubles Badminton champion from 1964 to 1975 and has served as coach of the U.S. Thomas Cup, Devlin Cup, and Uber Cup badminton teams.

An outstanding characteristic of doubles players competing in international badminton is their excellent service. Among teams of equal playing ability, those with the best service will generally win. This is primarily because they are able to start rallies in which they have scoring opportunities. When deciding upon a basic service strategy, the following factors must be considered:

1. The percent of rallies won when serving
2. The percent of services resulting in rallies
3. The number of service aces
4. The number of service errors (shuttle hit out of court)

These four factors are related in subtle ways and vary quantitatively depending upon the type of service hit. If the server tries to score points by hitting service aces, more difficult services are required and service errors will increase. This strategy is poor since it typically results in the number of service errors increasing at a markedly greater rate than the number of service aces. In addition, most top doubles teams always have the threat of scoring runs of several points at a time. This threat must not be eliminated by service errors. Since service errors are intolerable in competitive badminton, basic service strategy should be designed primarily to increase both factors 1 and 2 above and to increase the ratio of one to two. The difference between factors 1 and 2 is determined by whether the serving team can take the offensive and maintain control of the rally after the opponent returns the service. If the serving team can regain the attack, it will score points. In addition, increasing the ratio of 1 to 2 can be accomplished without the expense of increasing service errors (factor 4).

Where to Serve

The single best service is undoubtedly short and directed between the middle of the receiver's court and the center line. The prime reasons for this are:

1. The receiver has less chance to maintain the attack since the angles for service returns are poorest from the center areas of the court.
2. The receiver has less time to return the service (decision and execution time).
3. It is easier for the server to prevent a drop shot return of service, thus preventing an immediate loss of attack. This could be one of the most crucial factors in doubles.

Although about 90 percent of the services should be short and directed toward the center areas of the court, one must have a variety of services to counter the strength, weakness or strategy of the opponents. However, as one serves with a greater variety of placements, there is a loss in accuracy. Long serves (drives, flicks or high deep doubles serves) have the disadvantage of allowing the receiver to maintain the attack and have a relatively good chance of hitting a winning shot. In addition, when hitting long services, errors in service direction and/or trajectory are magnified because of the greater distance the shuttle must travel. On the other hand, there is a chance for a service return error if the long serve is used sparingly and at the appropriate time in the match. Thus, the long serve plays an important role as the receiver must be kept aware that this service may be hit at any time and also to prevent him from moving in too quickly for the return of a short service. The long service should also be used when the players on the serving side are having trouble executing short serves or are not winning points when they appear to be executing good short serves.

Backhand Service

With regard to the basic service strategy described above, the backhand service can fulfill most serving needs. In comparison with the forehand service, the backhand service has the following advantages and disadvantages:

Advantages of Backhand Service

1. It is easier to *consistently* execute the short service with *high accuracy* (even under tournament tension.)
2. The server watches her opponent and/or net and can serve at the optimal time if the opponent moves or loses her balance.
3. The service is very fast with a short swing and the shuttle is hit from a white background, thus allowing fewer cues for receiver anticipation (is not easily rushed).

4. The backhand service is easier for the server to return net drops if hit on the return of service.
5. Biomechanically the backhand is a more natural stroke.

Disadvantages of Backhand Service

1. It is more difficult to serve in the alley without loss in accuracy.
2. It is more difficult to develop enough power to hit flick and drive serves.

Service accuracy will increase if the server can reduce any unnecessary movements and standardize the movements involved in striking the shuttle. Backhand service eliminates the back swing and any arm movement of the hand holding the shuttle. In addition, the backhand serve is hit from in front of the body and is easier to execute than the forehand serve which is generally hit from the side of the body.

Execution of Backhand Service (Right-handed player)

1. Stand within inches of the intersection of the center and short service lines (at the T) and face the center of the receiver's court.
2. Hold the shuttle by the tip of one feather between the thumb and index finger of the left hand. The left elbow should touch the body about 6 inches lateral to the midline. The left arm should be in such position that the shuttle is about 3 inches to the left of the midline, about 6-8 inches below the waist and about 9-10 inches in front of the body.
3. The racket is held with a backhand grip, the right thumb being placed against the side of the handle which is parallel to the plane of the racket head.
4. The racket head is placed against the server's clothing in such position that the middle of the strings are about 6-8 inches below the waist and about 3 inches to the left of the midline.
5. From the above basic service position, the server views the net or his opponent rather than the shuttle during delivery of the service.
6. For the short service, the shuttle is hit primarily by extending the forearm in a short quick motion. The wrist is broken (hyper-flexed) only for drive and flick serves to gain the needed power.
7. This service is best practiced by hitting against a wall until a rhythm is established that feels comfortable and the service procedures are standardized.

In brief, the low, short service can be hit very accurately and should be the primary service in doubles events. Consistent service can be achieved best by standardizing the backhand service procedures. Drive and flick serves should be used sparingly to provide variety and a change of pace.

Tournament Procedures

BARBARA HORWITZ
ALLYS SWANSON

Barbara Horwitz has served as secretary of the Minnesota State Badminton Association and on the state tournament committee since 1964. In addition, she has also competed and won the women's doubles and mixed doubles in a variety of Minnesota badminton tournaments over the past eight years. Barbara is an avid promoter of badminton and has done much work with clinics and demonstrations.

Allys Swanson received her Bachelor of Arts and Master of Arts degrees from the University of Iowa, Iowa City. Currently, she is an associate professor and department chairperson of physical education at the College of St. Catherine in St. Paul, MN. She has also taught badminton at the MDGWS summer workshop at Carleton College, Northfield, MN.

Badminton has been growing in the schools through the effort of interested and encouraging physical education teachers. Every year the Minnesota State Badminton Association has a state tournament, and the most entries come from areas where badminton is the strongest in the schools at all levels. When there is intramural competition throughout the school year, badminton is an accepted part of the curriculum. During the season when there is badminton instruction, a valuable incentive to encourage more and better play is to run a tournament either within the limits of the class or with other schools of the same age or grade level.

Everyone can participate at these tournaments because of the seeding. A weak player may lose her first round, but the practice she may get from preparing for a tournament and competing may prove to be extremely valuable.

Planning the Tournament

1. It is necessary to secure a place in advance. A gymnasium free of any other activities with at least four courts is advisable.
2. Equipment, prizes and needed officials should be secured several weeks before the tournament.
3. Entry forms should be mailed at least two weeks prior to a tournament, preferably one month, with return deadline one week prior to the event.
4. Number of entries, number of events and type of tournament should reflect your specific situation. See entry form on page 00.

5. The total number of hours needed for the facility depends on the size of the draw and type of tournament. It is a fair estimate to say that two out of three matches in the first round require no more than 20 minutes. When competition becomes closer, a match will last about 40 minutes. Getting the matches started on time continues to be a major problem.
6. Boyden and Burton[1] suggest that in a large tournament it is a good idea to schedule an open court now and then just in case a problem should arise. It can always serve as a practice court.
7. When contestants are entered in more than one event (singles, doubles, mixed), the events should be alternated between the men and women so no player will have to play successive matches in the early rounds.
8. Following the tournament, solicit suggestions from participants and helpers to help make the next tournament run more smoothly.

When sending entry forms, it is advisable to send several entries to all interested participants. Below is a sample entry form used at the Minnesota State Badminton Tournament is on pages 178-179. This is an elimination tournament with consolation events only in doubles because of a time factor. When preparing any tournament, the chairman may select what type she wants to have–round-robin, double elimination, or consolation for all first round losers to allow for more participation. If all important information is mentioned on the entry form, very few complications need arise.

Summary

The enthusiasm and the training are key points if we want our tournaments to grow and be effective. Good planning will encourage more participants for all types of play.

[1] E. Douglas Boyden and Roger G. Burton, *Staging Successful Tournaments* (Hollywood, CA: Creative Sports Books, Div. of Creative Editorial Service, 1971).

Minnesota Badminton Association
1972 State Junior Badminton Tournament
(Closed)

Augsburg College — **731 - 21st Avenue South**
Si Melby Gym — **Minneapolis, Minnesota**

April 7, 8, 9

Friday: 3:00 P.M. to 10:00 P.M.
Saturday: 9:00 A.M. to 9:00 P.M.
Sunday: 12:00 P.M. to 5:00 P.M. (Finals)
Fee: $2.00 per person for 1st event - $1.50 for each event
Entry Deadline: Entries must be received by April 1, 1972

(a) Tournament is sanctioned by ABA.
(b) Consolidation events for first match losers in all doubles events where entry warrants.
(c) Birds will be furnished.
(d) Showers available. Bring your own towel.
(e) 15-minute forfeit rule in effect for all matches.
(f) Food will be available.

Entry Blank

Name — **Month / Day / Year**
First _____ Initial ____ Last _____

Address _____ City _____ Phone _____

School _____ Grade ____
Signature of Parent or Guardian: _____

Please enter me in the events checked below

Class A - Juniors who will not have reached their 19th birthday on April 30, 1972

Boys singles _____
Girls singles _____
Boys doubles _____ Partner's Name _____

Girls doubles _____ Partner's Name _____
Mixed doubles _____ Partner's Name _____

Class B–Juniors who will not have reached their 16th birthday on April 30, 1972

Boys singles _____
Girls singles _____
Mixed doubles _____ Partner's Name _____
Girls doubles _____ Partner's Name _____
Mixed doubles _____ Partner's Name _____

(Partner must file separate entry)

Return to: Minnesota Badminton Association
1786 Pinehurst
St. Paul, Minnesota 55116

Telephone:
698-5187
or
699-7628

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Badminton Bibliography

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GEORGANNA S. COTTMAN
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Badminton Review. The Canadian Badminton Association, 333 River Rd., Ottawa, Ontario KIL8B9. $3/year.

Badminton U.S.A. Beatrice Massman, ed., 333 Saratoga Rd., Buffalo, NY 14116. $3/year.

Instruction Materials

Badminton and Tennis Strokes. 24 pp. Ashaway Products, Inc., Ashaway, RI 02804. Free.

Badminton Rules. Dayton Racquet Co., Arcanum, OH 45304. Free.

Forgie, Hugh. *Pictorial Instruction Sheet - Badminton.* Bancroft Company, Pawtucket, RI.

Guide to Better Badminton. 16 pp. Ashaway Products, Inc., Ashaway, RI 02804. Free.

Badminton Visual Aids

Revised by SYBIL HILTON
Bakersfield College
Bakersfield, CA

Prices are subject to change. Numbers in parentheses refer to film distributors. Evaluation of films: E - Excellent, VG - Very Good, G - Good.

16mm Films

Advanced Badminton. 19 min., sound, color, sale $225. (2). Wynn Rogers explains advanced techniques and strategy as champion players peform. Badminton of international calibre is played by men and women of different generations. Use of deception, differences and approach in playing singles, doubles and mixed doubles is explained. E.

All England World Championship Singles Finals. 1967, 60 min., sound, b&w. Rental $25. (6). Exciting final match between Judy Hashman (USA) and Noriko Takagi (Japan). Brief preface describing points of special interest to anticipate in film. E.

Badminton Fundamentals. 12 min., sound, color, sale $140. (2). Basic skills for beginners include footwork, grips, service, and forehand and backhand strokes. Skills performed by young and old, females and males, champions and beginners and in normal speed and slow motion. VG.

Fundamentals of Badminton. 1960, 12 min., sound, b&w. Sale $60, rental $5. (3). Basic fundamentals are demonstrated by skilled players. Power and touch shots are covered. Simple drills for practice and stroke production helpful for general instruction. G.

20th (1973) U.S. Open Amateur Badminton Tournament, Travelers Highlights. 22 min., sound, color. Free (7). Swedish Eva Twedberg and Canadian Barbara O'Brien show excellent ladies' singles strokes and game strategy. American Don Paup and Jim Poole play doubles against #1 seeded English team of Tredgett and Talbot in an exciting three-game upset. Three left-handers necessitate strategy adjustments. Men's singles pits English Talbot against Swedish Johnson in beautiful power and touch shot rallies. E.

Loop Films

Badminton. Series of 13 films, color. Sale $22.95/cartridge or $234/set. (4). Films range from beginning fundamentals of grips and footwork to advanced shot production. Experienced teachers and competitors demonstrate badminton techniques. One can and

should preview for purchase or return within 30 days depending on supplemental value to instructional program.

Badminton. Sale $22.95/cartridge or $137.40/set. (5). Six films were made utilizing the expertise of Jim Poole, Dominquez Hills State College, CA. They include grip and service, overhead forehand strokes, overhead backhand strokes, underhand net strokes, drives and around-the-head strokes and footwork. These are detailed in the *1972-74 Guide.*

1971 Canadian Open Finals. 16mm produced by Canadian Badminton Association, 333 River Rd., Ottawa, Ontario, Canada K1L8B9. VG.

Bulletin Board Materials

Badminton-Courts, Scoring, Strokes. Displays scoring in both doubles and singles, court differences, and the need to use a variety of strokes. Available from Easy Post, Box 425, Normal, IL 61761. $1.50.

Badminton Technique Charts. 12 charts. $1.50. (1). Includes courts, equipment, grips, serves, drives, clears, smash, drops, net shots, flight patterns, readiness positions and types of doubles play.

Badminton Wall Charts. Diagrams of court, rules and playing principles as to court position. Available from Diagram Visual Information Ltd., 41 King St., London, WC2E8JS, England.

Distributors

(1) AAHPER, 1201 16th St., N.W., Washington, DC 20036.
(2) Aims Instructional Media Services, Inc., P.O. Box 1010, Hollywood, CA 90028.
(3) All American Productions and Publishers, c/o George B. Pearson, Dept. of HPER, University of Alabama, University, AL 35486.
(4) Athletic Institute, 705 Merchandise Mart, Chicago, IL 60654.
(5) Ealing Film-Loops, 2225 Massachusetts Ave., Cambridge, MA 02140.
(6) J. Frank Devlin, RFD #2, Dolfield Rd., Owings Mills, MD 21117.
(7) Travelers Insurance Companies, One Tower Square, Hartford, CT 06115.

BADMINTON STUDY QUESTIONS
1976–1978

Revised by the Badminton
Examinations and Ratings Committee

PART I

Directions

Select the one item which best answers each question. Assume no conditions exist other than those stated. Team A is always serving. Team B is always receiving.

1. Which of the following constitutes a fault on the serve?
   A. The shuttle is contacted below the server's waist.
   B. The served shuttle passes over the net and lands in the diagonally opposite service court.
   C. The server slides the rear foot forward during the service delivery.
   D. The shuttle is struck on the frame of the server's racket.
2. In which of the following situations would only one player of a doubles team have the right to serve?
   A. In ladies' doubles, when the score is tied at 13-all
   B. At the start of each game
   C. After changing ends at 8-all in the third game
   D. At the start of the first game only
3. When can the umpire overrule the call of a linesman?
   A. At a time when the linesman makes an error
   B. At no time during a match
   C. At match-point in the third game
   D. At the first sign of the linesman's inattention
4. Team A was the first to reach the score of 13; team B tied the score at 13-all; team A elected not to set. The score is now 14-all. Which of the following is correct?
   A. The game must be played to 15 as the game was not set at 13-all.
   B. The game may be set at 5 or may be played out to 15.
   C. The game may be set at 3 or may be played out to 15.
   D. The game may be set and the teams continue to play until one team is ahead by 2 points.
5. When should players change ends in the third game?
   A. After the leading score has reached 7 in a game of 15
   B. After both sides reach a score of 6 or better in a game of 11
   C. After both sides reach a score of 10 or better in a game of 21

D. Immediately after it is discovered that the players erred and failed to change ends at the proper time

6. Which of the following statements related to scoring is correct?
   A. A 'set' ladies' singles game is always played to 12 points.
   B. Both men's and women's singles games are played to 11 unless a 'set' situation occurs.
   C. In a 'set' situation, the server has the choice whether to set.
   D. In championship play, a match is determined by the best 3 out of 5 games.

7. Which statement describes the correct speed of the shuttle?
   A. The shuttle is from a newly-opened tube.
   B. The shuttle is mutually acceptable to both teams.
   C. A player of average strength stands on one back boundary line and hits the shuttle with a normal underhand stroke to a point not more than 2'6" short of and not less than 1' from the other back boundary line.
   D. The same as C, except that the player uses an overhead stroke.

8. The team winning the toss at the start of a match chooses not to serve first. What option is available to the other team?
   A. Must serve first and must choose ends
   B. May only serve first
   C. May request a repeat of the toss
   D. Must serve first and may choose ends

9. Which of the following is a requirement for a legal serve?
   A. All parts of the racket head must be below all parts of the racket hand.
   B. All parts of the racket must be below the server's waist.
   C. The server's feet must be kept on or within the lines of the respective service court.
   D. The shuttle must be held by the feathers before delivery.

10. Which of the following constitutes a fault during play?
   A. A player contacts the shuttle outside the boundaries of the court.
   B. A player's racket passes over the net after striking the shuttle.
   C. A player's clothing touches the net during a rally.
   D. A player completely misses the shuttle before that player's partner returns the shuttle safely.

11. At which point should a 'let' be called on the serve?
   A. The shuttle touches the net on passing over and lands within the diagonally opposite service court.
   B. The shuttle passes over and then gets caught in the net.
   C. Following an attempt to return the serve, the receiver claims not to be ready.

D. The server serves from the wrong court and loses the rally.

12. The shuttle, struck by team A, hits the net and falls back; team B then strikes the net with the racket. What is the decision?
    A. A 'let' is called.
    B. A fault on team B is called.
    C. Team A loses the rally.
    D. A point is awarded to each side.

13. In the United States, for how long and at what time is play suspended?
    A. For 5 minutes between the second and third games, only if both teams request the suspension.
    B. For 5 minutes between the second and third games, if one or both teams request the suspension.
    C. For 5 minutes between the second and third games, regardless of the wishes of the players.
    D. For an indefinite period if one of the players is too fatigued to continue immediately.

14. If a spectator supporting team A throws an object on the court disrupting a rally, what is the duty of the umpire?
    A. To disqualify team A.
    B. To award the rally to team B.
    C. To warn team A of possible disqualification and to award the rally to team B.
    D. To call a 'let'.

15. If a player hits the shuttle twice in succession, who is entitled to call the fault?
    A. The offending player.
    B. The referee.
    C. Either the offending player or the referee.
    D. The umpire.

16. After a point is scored, which sequence of procedures should the umpire immediately follow?
    A. Mark the score, see that all players are ready, then call the score.
    B. Call the score, see that all players are ready, then mark the score.
    C. Mark the score, see that the receivers change courts, then call the score.
    D. Mark the score, see that the servers change courts, then call the score.

17. Team A strikes the shuttle at the net, and the referee is not sure whether or not team A reached over the net in so doing. What is the correct course of action for the referee?
    A. Ask team A to admit the fault.
    B. Abide by the umpire's decision.

C. Call a 'let.'
D. Call a fault on team A.

18. When is a shuttle considered to have landed in the court?
A. The cork hits the line and the feathers land outside the line.
B. The feathers hit the line and the cork lands outside the line.
C. The shuttle lands outside the line but immediately bounces within the line.
D. The shuttle's point of contact could not be determined.

19. What should a roving service judge do on seeing a service fault?
A. Call the fault.
B. Report the fault to the referee.
C. Report the fault to the umpire.
D. Warn the offender, after calling a let.

20. Which of the following is *not* a duty of a linesman?
A. Calling "good" if a player questions an obviously good shot
B. Covering the eyes if the shuttle was unsighted
C. Pointing toward the court if the shuttle lands in the court
D. Extending both arms horizontally while calling 'out' if the shuttle lands outside the court

21. When a team loses its first service at 10-all, what mark should the scorer make on the scoresheet?
A. A vertical line through both scoring columns
B. The next higher score for the server
C. A circle around the serving team's score
D. A line through the receiving team's score

22. During service, which one of the following motions of the server's toe is allowable?
A. Sliding forward
B. Swiveling in place
C. Sliding backward
D. Lifting off the floor

23. What is the correct height of the net at the posts?
A. 5'2"
B. 5'1"
C. 5'0"
D. 4'11"

PART II

Directions

Each of the following presents a situation which would require one of the decisions listed below. Assume no conditions exist other than those stated. Team A is always serving. Team B is always receiving.

A. Point
B. Let
C. Second service
D. Side out

24. Team A scores a point to reach 7. In the middle of the next rally, team B stops play to point out, correctly, that team A had served from the wrong court on the preceding rally. What is the decision?
25. The server is faulted for balking while, simultaneously, the receiver is faulted for leaving early. What is the decision?
26. Team A, in first service, returns a smash into the net, whereupon team B is called for double hit on the smash. What is the decision?
27. Player A scores to reach 7 and wins the next rally also. Immediately, player B appeals to the referee, who saw the play, that player A had faulted on service to reach 7. What is the decision?
28. Team B complains to the umpire after losing a rally that team A feinted on service. The service judge rules that the motion was characteristic and undeceiving to the receiver. It was first service. What is the decision?
29. In a singles game, player B wins a rally with a shot which is clearly neither caught nor slung nor hit twice, but about which the umpire has doubt. What is the decision?
30. In a singles game, player A smashes so that the shuttle lands with only the cork in the court. What is the decision?
31. On first service team A is called by the service judge for high serve, but the umpire feels that the serve was legal. What is the decision?
32. In a singles game, player A's smash strikes the net and falls back, but player B catches it before it hits the ground. Player A claims the point, saying that player B interfered with the shot during play. What is the decision?
33. The server, in attempting to serve, strikes the shuttle with the elbow. What is the decision?
34. On second service, team A's smash hits a player of team B who has fallen entirely out of the court. Team B argues that the shot was clearly out. What is the decision?
35. In rushing a low singles serve, player B's racket contacts the shuttle, then passes over the net and narrowly misses the face of player A, obstructing player A's vision. What is the decision?

PART III*

Directions

The following are duties that need to be performed by one of the officials of the game. Select the official who is responsible for that particular duty. Each official may be used many times, or not at all. Only one answer is correct for each question.

A. Referee
B. Umpire
C. Linesman
D. Service judge

36. Sees that the shuttles are of the legal speed.
37. Has the final decision as to whether a player did or did not reach over the net.
38. Has the final authority on the interpretation of the rules of service.
39. Sees that the net is of the proper height.
40. If possible, gives a decision if a linesman was unsighted.
41. Sees that the court is of the proper dimensions.
42. Keeps the score.
43. Sees that the receiver does not move before the serve.
44. Sees that the shuttle is not above the server's waist on the serve.
45. Has the right to default a player for delaying the game.

INQUIRIES

Inquiries concerning these study questions or theoretical examination questions should be directed to:

DIANE HALES
1421 Niagra
Claremont, CA 91711

*Inclusion of a Part III on the written examination for 1976-77 is subject to the approval of the Executive Council for the Affiliated Boards of Officials and the NAGWS Officiating Examinations and Techniques Committee.

ANSWERS AND RULE REFERENCES

PART I

Answer	*Rule Reference*
1. C	Law 14k,16
2. B	Law 11
3. B	Tech. Off., Duties of Ump.#3
4. C	Law 7a,c
5. D	Law 8
6. A	Laws 7,8
7. C	Law 4
8. A	Law 6
9. A	Laws 14,16
10. C	Law 14
11. B	Laws 12,17a,b
12. C	Law 19
13. B	Law 22
14. D	Tech. Off., Duties of Ump. #21
15. D	Tech. Off., Duties of Ump. #33
16. D	Tech. Off., Duties of Ump. #6
17. B	Tech. Off., Duties of Ump. #2
18. A	Tech. Off., Duties of Linesm. #2,4
19. D	Tech. Off., Duties of Roving S.J.
20. A	Tech. Off., Duties of Linesm. #2
21. C	Tech. Off., Scoring the Match
22. B	Tech. Off., Interp. #4
23.0B	Law 3

PART II

Answer	*Rule Reference*
24. A	Law 12
25. B	Law 17c
26. A	Law 14h
27. A	Tech. Off., Duties of Ref. #5, Duties of Ump., #2
28. A	Tech. Off., Interp. #5
29. D	Law 14h, Interp. #6
30. A	Tech. Off., Duties of Linesm. #2
31. C	Tech. Off., Duties of Ump. #4
32. D	Law 19
33. B	Law 18

34. A Law 14j
35. A Law 14j

PART III

Answer	*Rule Reference*
36. A	Tech. of Off.
37. B	Tech. of Off.
38. A	Tech. of Off.
39. A	Tech. of Off.
40. B	Tech. of Off.
41. A	Tech. of Off.
42. B	Tech. of Off.
43. B	Tech. of Off.
44. D	Tech. of Off.
45. B	Tech. of Off.

TECHNIQUES OF OFFICIATING BADMINTON

Revised by the Badminton Principles and Techniques of Officiating Committee

Note: Sections which have been reworded or clarified are designated by a check (✓).

DUTIES OF THE REFEREE

In each tournament the chairman or committee in charge shall appoint a referee to act for them in regards to rules, scoring and regulating play.

The referee shall–

1. Be in complete charge of match play except for the scheduling of the time and place of matches.
2. Be thoroughly familiar with, and rigidly enforce, the official laws of badminton, and the interpretations which are a part of the laws.
3. Have the authority and responsibility to appoint and remove umpires, linesmen and service judges.
4. See that the playing area, nets, posts, shuttles, etc., meet the requirements of the laws of badminton.
5. Be the final authority on appeal from the decision of the umpire, with authority to reverse the umpire's decision involving a point of law only. The scoring of a match can be affected only if the appeal is made to the referee before the next service is delivered.
6. Be present or available at the playing area at all times during match play, or shall be specifically represented by a deputy appointed by the referee.

DUTIES OF THE UMPIRE

The umpire has three main responsibilities: *To officiate* the match for the player, *to link* the match with the spectators and *to score* the match.

The umpire shall–

1. Thoroughly know the laws of badminton.
2. Have the final decision on all points of fact. A player may, however, appeal to the referee on a point of law only.

3. Recognize the linesman's decision as final on all points of fact on that linesman's designated line. The umpire cannot overrule the linesman. If a linesman is unsighted, the umpire may then give a decision if possible; otherwise, a let should be played.
4. Recognize a service judge's decision as final on all points of fact in connection with the delivery of the service as set out in Service Court Judge, 2. The umpire is responsible for calling the *receiver's* faults.
5. Call the score distinctly and loudly enough to be heard clearly by players and spectators. Call promptly and with authority. If a mistake is made, admit it, apologize, and correct it.
6. Score the match and record points on a score pad. When a point is finished, first mark the score, then see that the server changes courts and announce score before the next service. (If the umpire possesses less than a NAGWS National rating, the umpire may ask the service court judge to keep a duplicate score.)
7. Never ask spectators about a decision or be influenced by their remarks. If a decision cannot be reached, a let should be awarded.
8. Be responsible for all lines not covered by linesmen. (If at all possible, one person should be assigned to lines which the umpire is not in a favorable position to see.)
9. Firmly control the match without being officious. Keep play flowing without unnecessary interruptions while ensuring that the laws are observed. The game is for the players.
10. Allow the game to proceed, and do not call a "fault" when a doubt arises in the mind of the umpire or service judge as to whether an infringement of the laws has occurred. (The player has benefit of the decision.)
11. Be sole judge of any suspension of play and have the right to disqualify an offender for leaving the court or delaying the game (Law 22).
12. In the absence of a referee, appoint linesmen and service judges.

Before the Match–

13. Obtain the score pad from the referee. Enter player's position and receiver and server on the scorecard.
14. Check the net for height. See that the posts are on the lines and that tapes are correctly placed (Laws 2 and 3).
15. Ensure that the linesmen and service judges are correctly placed and know their jobs (see Linesmen and Service Court Judge).
16. Ensure that a sufficient quantity of tested shuttles (according to Law 4) is readily available for the match in order to avoid delays during play. If the players cannot agree, the umpire should have the shuttles tested; in a tournament, the umpire should refer to

the referee, in a match, the captains or referee. Once shuttles have been found to be acceptable, ensure that they are used unless circumstances alter.

Starting the Match–

17. Ensure that tossing is correctly carried out and that the winners and losers correctly exercise their options under Law 6.
18. Mark on the score pad for doubles the names of the players starting in the right-hand service courts. This enables a check to be made at any time to see whether the players are in their correct service courts. During the game, if the players get in their wrong service courts unnoticed, so that they have to stay there (Law 12), change the score pad accordingly.

During the Match–

19. See that no unnecessary delay occurs, or that the players do not leave the court without the permission of the umpire (Law 22). The umpire or the service court judge must determine if a delay of game is made by the server by taking more than five seconds to deliver the serve after both the server and receiver have taken their stance. A warning must be given for the first infraction of this rule in any match.
20. Record the score, server and the correct service courts of the players on the score pad if an unavoidable holdup occurs in a match (Law 22c).
21. Call a let if a shuttle or other object not connected with the match in progress invades the court or its environs, or a spectator interferes with the players.
22. Watch for faulty serving if there is no service judge. It is difficult to detect from the chair "serving above the waist" or "racket head above the hand." If there is any doubt, caution the player and ask for a service judge.
23. If no service judge is available, see that the *server* has both feet on the floor in a stationary position inside the service court when the shuttle is struck, and that there is no feint (Law 14d and Interpretation 1).
24. See that the *receiver* has both feet on the floor in a stationary position inside the service court until the service is delivered, and that the receiver does not move before the shuttle is struck (Laws 14c and 16).
25. Watch for double hit or faulty stroke under Law 14h. These should be immediately called by the umpire as "fault."
26. Watch for obstruction – for instance, sliding under the net; throwing the racket into the opponent's court; balking or unsighting an opponent during services (see Laws 14d, 14j, 16,

20, and Interpretation 5). Immediately call "fault, obstruction."
27. Watch for serving and receiving out of turn or from the wrong court. Law 12 should be thoroughly understood. When the rally has been completed, call "fault, service" or "fault, receiver," whichever the case may be.
28. Watch for striking of the shuttle before it crosses the net, and hitting the net with racket, person, or dress while the shuttle is in play (Laws 14f and 14g). Call "fault" immediately.
29. See that the option of "setting" is correctly exercised (Law 7).
30. See that the players change ends following each game and at the correct score in the third game (Law 8).
31. See that the winning side serves first.
32. Watch for a player interfering with the correct speed of the shuttle. The player should be warned and the shuttle discarded if necessary.
33. Do not allow players to call "no shot." "fault," "carry," etc.; warn them if they do, as it may distract their opponents. On no occasion should the umpire use the terms "no shot," "foul," or "no." Always use the term "fault."
34. Provide for the correct interval between the second and the third games where allowed.

At the End of the Match–

35. Announce winners and scores. Sign and turn in scorecard.

Calling the Match

1. When the players have finished warming up, announce–
   a. In a tournament:
      1) "final or semifinal of . . ." If neither, say nothing.
   b. In a tournament or match:
      1) Names of players with country, county or club where applicable.
      2) Name of the first server, and in the case of doubles, of the receiver.
      3) To start the match, call "love all, second service, play" in doubles; but "love all, play" in singles.
2. The umpire shall call the score immediately after marking the scorecard upon completion of play. Always call the server's score first.
3. Singles – when a player loses service, call "side out" followed by the score in favor of the new server.
4. Doubles – whenever the first server is serving, only the score will be called. When the second server is serving, call the score and "second server" for each point.

5. When a side reaches 14, or in the case of ladies singles, 10, call on the first occasion only "game point" or "match point." If a further game or match point occurs after setting, call it again on the first occasion. Game point or match point should always immediately follow the server's score where applicable, and precede the receiver's score.
6. When a linesman calls "out," or the shuttle falls outside a line for which the umpire is responsible, call "out" before calling the score.
7. When the option to set occurs, ask the player's or players' decision. Announce the decision loudly so that spectators can hear, calling "set 2 points," or 3 or 5 as appropriate, followed by "love-all."

At the End of the Game–

8. Announce "game to . . ." (the name[s] of the player[s] in a tournament or the name of the team represented – in the case of a meeting of representative teams) followed by the score – winner's score first – and, if appropriate, by "one game all." In the case of a match in a meeting between two teams, always define the contestants by the names of the actual players.
9 In the event of set games, announce the total game points, i.e., 12-9, 18-13.
10. At the end of the match announce "game and match to . . ." (the name[s] of the winner[s] and all scores).

Scoring the Match

The contestants' name should be entered on the horizontal lines of the scorecard.

A vertical line drawn through both scoring columns indicates service over.

At the beginning of a side's term of service, their existing score should be carried over and noted. *Note:* the "0" and the second "5" in part 4 in the singles scoring given below.

In regard to setting, the decision not to set is indicated by writing "no set" on the scoresheet at the point where the setting possibility occurs (see In setting, 1).

On a decision to set, draw a vertical line through the scoring column of the serving team and write the option on the scoresheet where the setting possibility occurs.

A double vertical line is drawn through both scoring columns and the final score entered to the right of the scorecard when the game is ended (see In setting, 2).

In singles:

1.

Jones/ 0 1 2 3 4 5		Jones serves and makes 5 points; then
Smith/		

2.

Jones/ 0 1 2 3 4 5		Jones loses the serve;
Smith/	0	

3.

Jones/ 0 1 2 3 4 5			Smith scores 2 points; then
Smith/	0 1 2		

4.

Jones/ 0 1 2 3 4 5		5	Smith loses the serve.
Smith/	0 1 2		

In doubles:

The initial server for each team shall be listed first.

To indicate the completion of one service, draw a circle around the last point (number) made by the first server. This will clearly designate the point at which the second server begins the term of service.

1.

Smith-Jones/ ⓪ 1 2 3		Smith-Jones commence serving, win 3 points, and lose the serve;
Reed-Brown/	0	

2.

Smith-Jones/ ⓪ 1 2 3		Reed-Brown win 2 points after obtaining the serve.
Reed-Brown/	0 1 2	

3.

Smith-Jones/ ⓪ 1 2 3		Reed-Brown lose the point, second serve.
Reed-Brown/	0 1 ①	

4.

Smith-Jones/ ⓪ 1 2 3		3	Reed-Brown win 3 more points and then lose the serve.
Reed-Brown/	0 1 ① 3 4 5		

In setting:

1.

Smith-Jones/	1 3		1 3
Reed-Brown/		(1) 12 13 14	
		No Set	

Smith-Jones have option to set all 13-all, decide not to set, no set is written at the current server's score of 13. They score a point, then lose the serve.

√2.

		Set 3				
Smith-Jones/ 13		(13)	14	1 2		16
Reed-Brown/	(1) 12 13 14				1 2 3	17

Smith-Jones win a point and score is 14-all. Reed-Brown have option to set and set 3. This is written above the server's current score (14) and a line is drawn through the serving team's (Smith-Jones) scoring column. Further scoring starts at 1, etc.

DUTIES OF THE SERVICE COURT JUDGES

The service court judges shall–

1. Sit on a low chair on the side of the court opposite the umpire. One service judge will sit on one side of the net while the other judge sits on the other side of the net. The service court judge should observe the legality of the serve by the server on the opposite side of net.
2. Be responsible for seeing that the server, at the moment of striking the shuttle–
   a. Does not have any part of the head of the racket above any part of the hand holding the racket (Law 14a).
   b. Does not have the shuttle above the waist (Law 14a).
   c. Has both feet in a stationary position on the floor inside the service court (Law 16).
   d. Does not feint (Law 14d and Interpretation 1).

(Note: To enable the service court judge to determine if the shuttle was legally contacted below the waist, the following technique is recommended. A piece of paper, cardboard, or like material can be held in such a way that the server's body from the waist up is completely blocked from vision. If the bird is contacted below the waist, the judge will see the bird. If the bird is not visible, an illegal serve was made.)

3. If the server does not comply with all the points in item 2 above, the service judge should immediately call "fault" loudly, and ensure that the umpire has heard the call. *Note:* The umpire watches the receiver.
4. Determine whether the server delays the game by taking more than five seconds to deliver the serve after the server and receiver have taken their positions. A warning must be given for the first violation of this rule in any match (Law 14d; Interpretation #1).
5. Assist in keeping score if necessary.

DUTIES OF THE ROVING SERVICE JUDGE

The roving service judge shall–

1. Wear an arm band or recognizable badge.
2. Move among the courts observing the services that are being executed in each match.
3. Take a position by the net post of any match in which service faults may be occurring.
4. Upon observing a service fault call a "let" and then warn the server and explain the nature of the fault.
5. If the server in question fails to comply with a legal serve (Duties of Service Court Judge, item 2), the roving service judge shall call a "fault."

DUTIES OF THE LINESMEN

The linesmen shall–

1. Sit on chairs in prolongation of their lines, at the ends of the court and at the side opposite the umpire.
2. Be entirely responsible for their designated lines. If the shuttle falls out, no matter how, call "out" promptly in a clear, loud voice. The linesman should reinforce the call by extending both arms horizontally at shoulder level with the right arm pointing to the right and the left arm to the left. If the shuttle falls in, say nothing but point in the direction of the court with a one-hand motion. The signal will assure the umpire that the linesman has seen the shuttle. If unsighted, the linesmen shall immediately place their hands over their eyes. *Note:* Notice where the cork of the shuttlecock lands in making a decision. A flat-angled shuttlecock may be out although the feathers are well inside the court line. Also, watch the line, not the shuttle. In watching a moving object, a stationary one may be lost. At the first indication that the shuttle may strike near your line, switch your gaze from the shuttle to the area where you expect it to land.

3. Never make a call until the shuttle has actually struck the ground outside the court.
4. If the cork touches any part of the line, it is in. Change a decision whenever necessary by voicing it before the next service.
5. If three linesmen are available, two should take a back boundary line and (in doubles) long service line each; the third; the side lines farthest from the umpire. If additional linesmen are available, they should be used according to the umpire's preference.

INTERPRETATIONS

1. When officiating, the umpire shall enforce the laws of badminton. In the absence of an umpire the players concerned shall carry out the laws, and if a violation be claimed by one side and not acknowledged by the other, a let shall be allowed. Umpires are recommended for all semifinal or final matches in any championship tournament.
2. In order to eliminate service faults in the early rounds prior to the semifinals or quarter-finals, a qualified service judge may be provided to act as a *roving* service judge who should be provided with an arm band or recognizable badge. The players should be informed of this judge. The roving service judge shall assume a position by the net post of a match in question, and on observing a service fault call a let. This judge will then warn the server and explain the nature of the fault. If the server continues to commit an illegal service the roving judge shall call a fault on the server.
3. If the receiver is faulted for moving before the service is delivered or for not being in the correct service court (see Laws 16 or 14c), and at the same time the server is also faulted for a service infringement (see Laws 14a, c, h, or 16) it shall be a let. If any player feints or intentionally balks an opponent, even before the delivery of the service (see Law 24d), the fault shall be recorded against the player concerned.
4. Service foot faults: Clarification of Law 16.
   a. Any forward step of either foot, or any other foot movement, must be completed and both feet must reach a stationary position on the floor prior to the start of racket motion to serve. "Start of racket motion" includes the backswing.
   b. Part of Law 16 reads "some part of both feet of these players must remain in contact with the ground in a stationary position until the service is delivered." The following three questions were asked and it has been ruled

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that the points raised do not constitute a breach of the law. Accordingly, players should not be faulted for these actions.

(1) Does this mean that the same part of a foot must remain in contact with the ground, or could it be a different part of the same foot?

(2) If the back foot of a server starts with the toe and heel in contact with the ground and rises onto the toe as the service is struck, with the heel rising straight, is this in order?

(3) On the other hand, if the heel comes off the ground and swivels through an angle of 90 degrees, as is frequently done, which means that the part of the toe remaining in contact with the ground swivels and moves, is this correct?

5. Service terminology: Law 14d states "If before or during the delivery of the service, any player makes a preliminary feint or otherwise balks an opponent, it is a fault." Webster's Second International Dictionary defines the terms "feint" and "balk" as "a feint is an assumed or false appearance . . . a mock blow or attack," and "a balk is a failure of a competitor to jump, vault, or the *like*, after taking a preliminary run . . . ." The service may be regarded as started when both players have taken stationary positions in readiness to serve and to receive. From that point until the shuttle is struck by the server, Law 14d applies. A motion to be considered a feint or balk must have some element of deception; it must not be some characteristic motion that has no purpose and does not deceive the receiver.
6. Calling faulty hits: Slow motion films have shown that practically all sharply hit shuttles strike the racket twice. The cork hits the racket, then the shuttle quickly reverses ends, and the feathers brush the gut as the shuttle leaves the racket. The motion is so fast that it seems to be a single hit. It is important for the umpire to recognize that illegal hits are a matter of degree and judgment and to give the hitter the benefit of the doubt.

INTERPRETATIONS

Questions concerning officiating techniques in badminton should be directed to:

MYRNA STEPHENS
Illinois State University
Normal 61761

LAWS OF BADMINTON*

(As adopted by the International Badminton Federation and the American Badminton Association)

1. Court. (a) The court shall be laid out as in Diagram A (except in the case provided for in paragraph b of this law) and to the measurements there shown, and shall be defined preferably by white or yellow lines, or, if this is not possible, by other easily distinguishable lines, 1½ inches wide.

In marking the court, the width (1½ inches) of the center lines shall be equally divided between the right and left service courts; the width (1½ inches each) of the short service line and the long service line shall fall within the 13-foot measurement given as the length of the service court; and the width (1½ inches each) of all other boundary lines shall fall within the measurements given.

(b) Where space does not permit the marking out of a court for doubles, a court may be marked out for singles only as shown in Diagram B. The back boundary lines become also the long service lines, and the posts, or the strips of material representing them as referred to in Law 2, shall be placed on the sidelines.

(c) The height of a court for international competition play shall be a minimum of 26 feet or 8 metres from the floor over the full court. This height shall be entirely free of girders and other obstructions over the area of the court.

There shall also be at least 4 feet or 1.25 metres clear space surrounding all the outer lines of the court, this space being also a minimum requirement between any two courts marked out side by side.

2. Posts. The posts shall be 5 feet 1 inch in height from the surface of the court. They shall be sufficiently firm to keep the net strained as provided in Law 3, and shall be placed on the side boundary lines of the court. Where this is not practicable, some method must be employed for indicating the position of the side boundary line where it passes under the net, e.g., by the use of a thin post or strip of material not less than 1½ inches in width, fixed to the side boundary line and rising vertically to the net cord. Where this is in use on a court marked for doubles, it shall be placed on the side boundary line of the doubles court irrespective of whether singles or doubles are being played.

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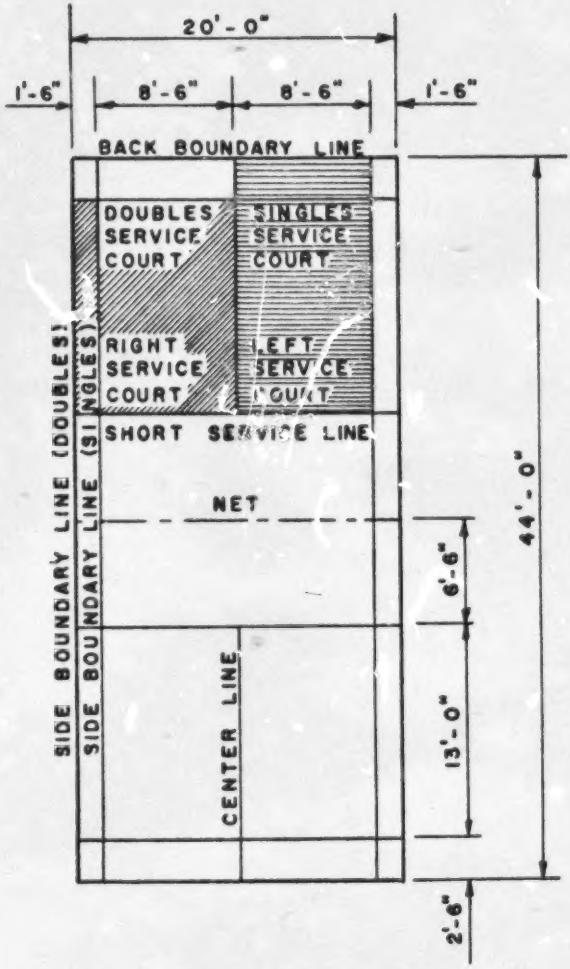
20'-0"
1'-6"
8'-6"
8'-6"
1'-6"
BACK BOUNDARY LINE
DOUBLES SERVICE COURT
SINGLES SERVICE COURT
RIGHT SERVICE COURT
LEFT SERVICE COURT
SHORT SERVICE LINE
NET
SIDE BOUNDARY LINE (DOUBLES)
SIDE BOUNDARY LINE (SINGLES)
CENTER LINE
6'-6"
13'-0"
44'-0"
2'-6"

Diagram A

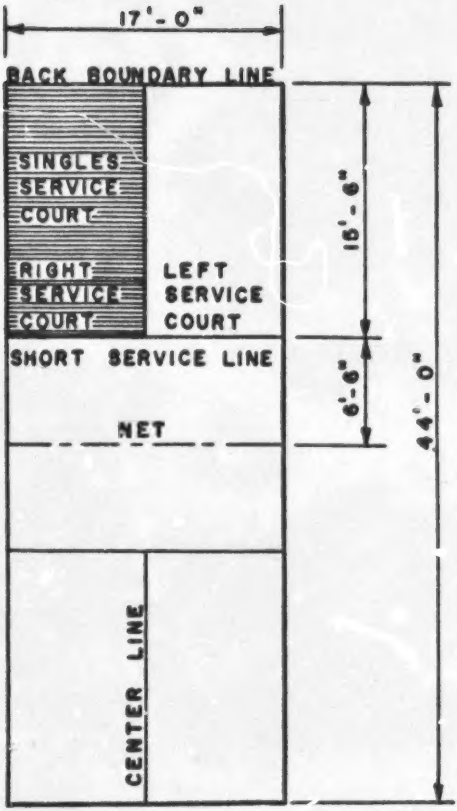
17'-0"
BACK BOUNDARY LINE
SINGLES SERVICE COURT
RIGHT SERVICE COURT
LEFT SERVICE COURT
SHORT SERVICE LINE
NET
CENTER LINE
18'-6"
6'-6"
44'-0"

Diagram B

3. Net. The net shall be made of fine natural cord or artificial fibre of a dark colour and an even thickness not exceeding 5/8 inch to 3/4 inch (1.5 to 2 cm.) mesh. It shall be firmly stretched from post to post, and shall be 2 feet 6 inches in depth. The top of the net shall be 5 feet in height from the floor at the center, and 5 feet 1 inch at the posts, and shall be edged with a 3-inch white tape doubled and supported by a cord or cable run through the tape and strained over and flush with the top of the posts.

4. Shuttle. A shuttle shall weigh from 73 to 85 grains, and shall have from 14 to 16 feathers fixed in a cork of 1 inch to 1-1/8 inches in diameter. The feathers shall be from 2½ to 2¾ inches in length from the tip to the top of the cork base. They shall have from 2-1/8 to 2⅛ inches spread at the top and shall be firmly fastened with thread or other suitable material.

Subject to there being no substantial variation in the general design, pace, weight, and flight of the shuttle, modifications in the above specifications may be made, subject to the approval of the national organization concerned, (a) in places where atmospheric conditions, due either to altitude or climate, make the standard shuttle unsuitable; or (b) if special circumstances exist which make it otherwise expedient in the interests of the game.

(Carlton Nylon Shuttles – Tournament and International grades – and RSL Plastic Shuttles have been approved for all tournaments except adult "Open" tournaments for which a $5 sanction fee is charged; Closed and Open ABA Amateur Championships; and U.S. National Junior Championships.)

A shuttle shall be deemed to be of correct pace if, when a player of average strength strikes it with a full underhand stroke from a spot immediately above one back boundary line in a line parallel to the sidelines, and at an upward angle, it falls not less than 1 foot and not more than 2 feet 6 inches short of the other back boundary line.

5. Players. (a) The word "player" applies to all those taking part in a game.

(b) The game shall be played, in the case of the doubles game, by two players on a side, and in the case of the single game, by one player on a side.

(c) The side for the time being having the right to serve shall be called the "in" side, and the opposing side shall be called the "out" side.

6. The Toss. Before commencing play, the opposite sides shall toss, and the side winning the toss shall have the option of (a) serving first, (b) not serving first, or (c) choosing ends. The side losing the toss shall then have choice of any alternative remaining.

7. Scoring. (a) The doubles and men's singles game consists of 15 or

21 points, as may be arranged. Provided that in a game of 15 points, when the score is 13-all, the side which has first reached 13 has the option of "setting" the game to 5, and that when the score is 14-all, the side which first reached 14 has the option of "setting" the game to 3. After a game has been "set," the score is called "love-all," and the side which first scores 5 or 3 points, according as the game has been "set" at 13-all or 14-all, wins the game. In either case the claim to "set" the game must be made before the next service is delivered after the score has reached 13-all or 14-all. Provided also that in a game of 21 points the same method of scoring be adopted, substituting 19 and 20 for 13 and 14. (In all Championship play, 15 points is the official game, rather than 21.)

(b) The ladies singles game consists of 11 points, provided that when the score is "9-all" the player who first reached 9 has the option of "setting" the game to 3, and when the score is "10-all" the player who first reached 10 has the option of "setting" the game to 2.

(c) A side rejecting the option of "setting" at the first opportunity shall not thereby be debarred from "setting" if a second opportunity arises.

(d) In handicap games, "setting" is not permitted.

8. The opposing sides shall contest the best of three games, unless otherwise agreed. The players shall change ends at the commencement of the second game and also of the third game, if any. In the third game the players shall change ends when the leading score reaches

(a) 8 in a game of 15 points,

(b) 6 in a game of 11 points,

(c) 11 in a game of 21 points,

or, in handicap events, when one of the sides has scored half the total number of points required to win the game (the next highest number being taken in the case of fractions). When it has been agreed to play only one game, the players shall change ends as provided above for the third game.

If, inadvertently, the players omit to change ends as provided in this Law at the score indicated, the ends shall be changed immediately the mistake is discovered, and the existing score shall stand.

9. Doubles Play. (a) It having been decided which side is to have the first service, the player in the right-hand service court of that side commences the game by serving to the player in the service court diagonally opposite. If the latter player returns the shuttle before it touches the ground, it is to be returned by one of the "in" side, and then returned by one of the "out" side, and so on, until a fault is made or the shuttle ceases to be "in play" (see paragraph b). If a fault is made by the "in" side, its right to continue serving is lost, as

only one player on the side beginning a game is entitled to do so (see Law 11), and the opponent in the right-hand service court then becomes the server, but if the service is not returned or the fault is made by the "out" side, the "in" side scores a point. The "in" side players then change from one service court to the other, the service now being from the left-hand service court to the player in the service court diagonally opposite. So long as a side remains "in," service is delivered alternately from each service court into the one diagonally opposite, the change being made by the "in" side when, and only when, a point is added to its score.

(b) The first service of a side in each inning shall be made from the right-hand service court. A "Service" is delivered as soon as the shuttle is struck by the server's racket. The shuttle is thereafter "in play" until it touches the ground, or until a fault or "let" occurs, or except as provided in Law 19. After the service is delivered the server and the player served to may take up any positions they choose on their side of the net, irrespective of any boundary lines.

10. The player served to may alone receive the service, but should the shuttle touch, or be struck by, his partner the "in" side scores a point. No player may receive two consecutive services in the same game, except as provided in Law 12.

11. Only one player of the side beginning a game shall be entitled to serve in its first innings. In all subsequent innings each partner shall have the right, and they shall serve consecutively. The side winning a game shall always serve first in the next game, but either of the winners may serve and either of the losers may receive the service.

12. If a player serves out of turn, or from the wrong service court (owing to a mistake as to the service court from which service is at the time being in order), and his side wins the rally, it shall be a "let," provided that such "let" be claimed and allowed, or ordered by the umpire, before the next succeeding service is delivered.

If a player of the "out" side standing in the wrong service court is prepared to receive the service when it is delivered, and his side wins the rally, it shall be a "let," provided that such "let" be claimed and allowed, or ordered by the umpire, before the next succeeding service is delivered.

If in either of the above cases the side at fault loses the rally, the mistake shall stand and the players' position shall not be corrected.

Should a player inadvertently change sides when he should not do so, and the mistake not be discovered until after the next succeeding service has been delivered, the mistake shall stand, and a "let" cannot be claimed or allowed, and the players' position shall not be corrected.

13. Singles Play. Doubles Laws 9 to 12 hold good except that –

(a) The players shall serve from and receive service in their

respective right-hand service courts only when the server's score is 0 or an even number of points in the game, the service being delivered from and received in their respective left-hand service courts when the server's score is an odd number of points. Setting does not affect this sequence.

(b) Both players shall change service courts after each point has been scored.

14. Faults. A fault made by a player of the side which is "in" puts the server out; if made by a player whose side is "out," it counts a point to the "in" side. It is a fault –

(a) If in serving, the shuttle at the instant of being struck be higher than the server's waist, or if at the instant of the shuttle being struck the shaft of the racket be not pointing in a downward direction to such an extent that the whole of the head of the racket is discernibly below the whole of the server's hand holding the racket.

(b) If in serving, the shuttle does not pass over the net, falls into the wrong service court (i.e., into the one not diagonally opposite to the server), or falls short of the short service line, or beyond the long service line, or outside the side boundary lines of the service court into which service is in order.

(c) If the server's feet are not in the service court from which service is at the time being in order, or if the feet of the player receiving the service are not in the service court diagonally opposite until the service is delivered (see Law 16).

(d) If before or during the delivery of the service any player makes preliminary feints or otherwise intentionally balks his opponent, or if any player deliberately delays serving the shuttle or in getting ready to receive it, so as to obtain an unfair advantage.

(e) If, either in service or play, the shuttle falls outside the boundaries of the court, or passes through or under the net, or fails to pass the net, or touches the roof or side walls or the person or dress of a player. (A shuttle falling on a line shall be deemed to have fallen in the court or service court of which such line is a boundary.)

(f) If the shuttle "in play" be struck before it crosses to the striker's side of the net. (The striker may, however, follow the shuttle over the net with his racket in the course of his stroke.)

(g) If, when the shuttle is in play a player touches the net or its supports with racket, person, "in play" or dress "in play".

(h) If the shuttle be held on the racket (i.e., caught or slung) during the execution of a stroke; or if the shuttle be hit twice in succession by the same player with two strokes; or if the shuttle be hit by a player and his partner successively.

(i) If, in play, a player strikes the shuttle (unless he thereby makes a good return), or is struck by it, whether he is standing within or outside the boundaries of the court.

(j) If a player obstructs an opponent.
(k) If Law 16 be transgressed.

General

15. The server may not serve until his opponent is ready, but the opponent shall be deemed to be ready if a return of the service is attempted.

16. The server and the player served to must stand within the limits of their respective service courts (as bounded by the short and long service, the center and sidelines), and some part of both feet of these players must remain in contact with the surface of the court in a stationary position until the service is delivered. A foot on or touching a line in the case of either the server or the receiver shall be held to be outside his service court (see Law 14c).

The respective partners may take up any position, provided they do not unsight or otherwise obstruct an opponent.

17. (a) If, in the course of service or rally, the shuttle touches and passes over the net, the stroke is not invalidated thereby. It is a good return if the shuttle having passed outside either post, drops on or within the boundary lines of the opposite court. A "let" may be given by the umpire for an unforeseen or accidental hindrance.

(b) If, in service, or during a rally, a shuttle, after passing over the net, is caught in or on the net, it is a "let."

(c) If the receiver is faulted for moving before the service is delivered, or for not being within the correct service court, in accordance with Laws 14c or 16, and at the same time the server is also faulted for a service infringement, it shall be a "let."

(d) When a "let" occurs, the play since the last service shall not count, and the player who served shall serve again, except when Law 12 is applicable.

18. If the server, in attempting to serve, misses the shuttle, it is not a fault; but if the shuttle be touched by the racket, a service is thereby delivered.

19. If when in play the shuttle strikes the net and remains suspended there, or strikes the net and falls towards the surface of the court on the striker's side of the net, or hits the surface outside the court and an opponent then touches the net or shuttle with his racket or person, there is no penalty, as the shuttle is not *then* in play.

20. If a player has a chance of striking the shuttle in a downward direction when quite near the net, his opponent must not put up his racket near the net on the chance of the shuttle rebounding from it. This is obstruction within the meaning of Law 14j. A player may, however, hold up his racket to protect his face from being hit if he does not thereby balk his opponent.

21. It shall be the duty of the umpire to call "fault" or "let" should either occur, without appeal being made by the players, and to give his decision on any appeal regarding a point in dispute, if made before the next service, and also to appoint linesmen and service judges at his discretion. The umpire's decision shall be final, but he shall uphold the decision of a linesman or service judge. This does not preclude the umpire also from faulting the server or receiver. Where, however, a referee is appointed, an appeal shall lie to him from the decision of an umpire on questions of law only.

22. Continuous Play – Play shall be continuous from the first service until the match be concluded, except that

(a) In the International Badminton Championships there shall be allowed an interval not exceeding five minutes between the second and third games of a match.

(b) In countries where conditions render it desirable, there shall be allowed, subject to the previously published approval of the National Organization concerned, an interval not exceeding five minutes between the second and third games of a match, either singles or doubles or both; and

(c) When necessitated by circumstances not within the control of the players, the umpire may suspend play for such a period as he may consider necessary. If play be suspended, the existing score shall stand and play be resumed from that point. Under no circumstances shall play be suspended to enable a player to recover his strength or wind, or to receive instruction or advice. Except in the case of an interval provided for above, no player shall be allowed to receive advice during a match or leave the court until the match be concluded without the umpire's consent. The umpire shall be the sole judge of any suspension of play and he shall have the right to disqualify an offender. (In the U.S., at the request of any player, a five-minute rest period between the 2nd and the 3rd game will be granted, in all events. Such a rest period is mandatory for all Junior Tournaments.)

INTERPRETATIONS

1. Any movement or conduct by the server that has the effect of breaking the continuity of service after the server and receiver have taken their positions to serve and to receive the service is a preliminary feint. For example, a server who, after having taken up his position to serve, delays hitting the shuttle for so long as to be unfair to the receiver, is guilty of such conduct. (See Law 14d.) Note – U.S. interpretation is: it is a fault if the serve is not delivered in five seconds from the time that both server and receiver have taken their stance.

2. It is obstruction if a player invades an opponent's court with racket or person in any degree except as permitted in Law 14f (see Law 14j).
3. Where necessary on account of the structure of a building, the local Badminton Authority may, subject to the right of veto by its National Organization, make bylaws dealing with cases in which a shuttle touches an obstruction.

CLARIFICATION OF RULES – NAGWS Badminton Guide Committee

Law 12, Paragraph 1. Serving out of turn from the wrong service court may mean (a) the correct server delivers a serve from the wrong service court, or (b) this wrong server delivers a serve from either the correct or incorrect service court.
Law 12, Paragraph 2. "Takes the serve" means receives the serve.
Law 12, Paragraph 4. The procedure given for a player inadvertently changing sides when he should not do so, under the conditions noted, also applies should a player fail to change sides when he should do so, under the same conditions.

ABA Statement

Although the preceding are the rules as of this date, these rules may change from year to year to some extent. Hence, anytime after 1976, to assure yourself that you are dealing with the up-to-date rules, you should secure them from the Chairman, American Badminton Association Rules Book Committee. The current Chairman is Lester E. Hilton, 15 Tanglewood Drive, Cubberland, Rhode Island 02864.

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*The current *Guide* was prepared by the 1974-76 Committee; the 1978-80 *Guide* will be prepared by the 1976-78 Committee.

Teaching Squash Without a Squash Court

EMILY J. MAGOON

Emily Magoon received her B.S. degree from Skidmore College, Saratoga Springs, NY, and her M.Ed. and Ed.D. degrees from Boston University where she teaches in the School of Education, Department of Movement, Health and Leisure. She has been active in the USWSRA as treasurer, chairman and member of the Ranking Committee, and was a member of the 1961 Wolfe-Noel Cup team to Great Britain.

Sometimes, hopefully not too often, we are called upon to teach beyond the call of duty a sport without the correct or adequate facilities. A dilemma to be sure, but with a bit of ingenuity we find ourselves making do. Such has been my lot for the last four years. It has stemmed from the desire to teach another racket sport to the physical education majors, or at least expose them to that great activity, squash, but no facilities have been available. What to do?

First arrange to have the use of several courts at least one or two times during your teaching of the unit. Next, scour up as many rackets as possible so that there is one for at least every two or three students. Purchase some English or Australian balls that have more bounce and return at a slower pace than American balls.

Start your basic teaching with the forehand and then the backhand. Emphasize the difference between this and other racket sports—elbow in close to the body, wrist cocked, knees bent, body crouched, meeting the ball out in front of the forward foot as far as you can reach comfortably and still getting your weight into your shot, and shortness of swing.

Since the best strategy in beginning squash is to hit the ball well and keep your play as simple as possible, start your students hitting the ball straight at the front wall, up and down, up and down. The question is, what front wall? This brings up the title of this article, "Teaching Squash Without a Squash Court," in other words, using a gymnasium. A gym is usually a rectangle. After explaining to your groups the stroke they are to practice, set them up at the four corners so that they are facing a wall. At the moment they have only a front wall and one side wall. Tape on the floor can give you the dimensions needed for each court or part court, including the right and left service courts, the service line, and the "tin" line on the front wall.

Depending on the size of the group, they can be set up in any multiples of two, three or four in each area. Each person starts to hit straight up and down the wall, concentrating on getting the ball back

to herself. After each person has a turn at hitting a forehand several times and has had some success, the backhand can be introduced and practiced, emphasizing the same idea of returning the ball straight back. Once the groups are able to perform both strokes, they can rotate corners of the gym so that the ones who had the wall on their right side when facing the front wall will now have the wall on their left side. In this way they can get practice in gauging their success of keeping both forehands and backhands close to the side wall.

The next step is to put two players side-by-side in the "court" that is taped on the floor. This is an excellent time to show them a mock-up of an actual squash court and to explain the rules of the game, player positioning relative to getting back to the "T," and the importance of a player to try to stay in front of her opponent and always be aware of where she is. Once the basic rules have been explained, demonstrate the serve, serving from the left service court first so the players can see the body position, one foot in the service court, and where to aim on the front wall so that a high serve will fall successfully in the right service court. Do the same from the right service court. Now have them practice the serve until they can get it in with a high, soft service. Remember, we are trying to keep the game as simple as possible.

The players are now ready to play a simple game in their respective courts, following the rules as explained above. You should be able to stay in the middle of the gym and cover each area in its turn. Make sure that each group gets a chance to play in a court with both a forehand and a backhand sidewall. Naturally, all of this is not going to start in one day. As the players become more adept and begin to enjoy the game, they can be taught a crosscourt shot and a corner shot. Then they are ready to learn to volley and to try to intercept the ball before it goes behind them.

As soon as possible, try to provide an opportunity for your group to play on regular courts so they can experience the excitement of playing on all four walls and hearing the ball actually strike the tin. A great climax to the game of squash without a squash court. On to bigger and better games!

The Serve

ANN WETZEL

Ann Wetzel received her teaching certificate from the University of Pennsylvania, Philadelphia. She has been active in the USWSR.; and won the National Singles Championship in 1964 and has won the National Doubles Championship five times. In 1972 she won the Achievement Bowl. Ann is tennis and squash coach and recreation supervisor at the University of Pennsylvania.

There are several types of effective serves in squash. The main and basic one is the *lob serve.* The entire action is done with a firm wrist and a sideward or an upward motion. The idea is to have the ball travel in an oval pattern; the top half of the oval will reverse to the other side of the court as the trajectory changes when the ball hits the front wall. The server must have one foot in the red quarter circle marked on the floor. From the right side, it is best to stand with the feet and shoulders between a square and open position as if the left shoulder were pointing toward the left front corner. (Directions are for a right-handed player.) On the left side the feet and shoulders will be more parallel to the right side wall. Sometimes it is helpful to have a closed stance, particularly if the server is having difficulty with direction. The ball is dropped or tossed lightly in front of the left knee. There must be enough arch on the swing to allow the ball to have the lob action. It is also necessary to swing forward at the point of contact to permit the ball to travel deep enough in the opposite service box barely hitting the side wall. The point of aim is about three rackets above the middle of the front wall when serving to the left court. When serving to the right court, it is a little to the right of mid-court on the front wall. Experimentation and practice are needed so the server can learn how to make the ball land softly and deep in the court.

Another good serve is the *chop-angle serve.* To do this, the racket is rested just off the shoulder. The ball is tossed up and a little in front. The stroke is executed in a forward punching manner. The ball should have a downward direction as it returns from the front wall and land in the opposite semicircle near the side wall. This is a very good change of pace serve and particularly effective against the person who is good at volleying the return. The server should move with the serve towards the center of the court to be in good position for the next shot.

A third serve is the *hard serve.* The test to see if a player will be able to succeed with this serve is to stand behind the red line on the

floor and hit the ball so it travels directly to the front wall and to the back wall without a bounce. If this can be done, then it is time to practice the several different angles for the serve. It is possible to execute this as a tennis type serve by moving the hand around the racket to a "cheating" type grip to gain more power from a flat impact.

The return of serve is perhaps the most difficult thing to learn in squash. A good receiving position is to stand the length of a racket stretched away from the back wall, facing the side wall to which the serve is going and about one foot inside the middle red line. It is necessary to turn the head to follow the ball for the entire flight. Frequently, it is necessary to volley (hit the ball in the air before it hits the back wall). This is often referred to as a "pickoff" shot. It is a good idea to try to stroke the return down the near side wall and then move to the center "T" of the court. As skill increases, the returns can be varied. The student is told to keep her racket up and to keep her eye on the ball. When the ball is coming at a high level and reasonably hard, she will want to let the ball come off the back wall. She should back away and then stroke the return. Very hard serves that look as though they might hit a back crack should always be volleyed. As skill increases, players will discover many ways to handle the return of serve and be able to vary it.

Serves and returns of serve should be practiced a great deal for they are very important.

5-Point Strategy Plan for Squash Players

1. Hit deep down nearest side wall.
2. a. Hit ball deep down wall.
   b. Cross court
3. Cross court everything– this moves opponent away from center court position.
4. Hit a deep ball; follow up with a short shot.
5. Play your opponent's weakness, whether it be a backhand or some other area where you feel she is weak.

General Tips

1. Learn to *look* at the ball, not watch it go by.
2. Learn to move with the ball, not charge at it.

Coaching an Intercollegiate Squash Team

AGNES BIXLER KURTZ

Agnes Bixler Kurtz received her M.A. and M.S. degrees from Smith College, Northampton, MA. She has been active in the USWSRA as Howe Cup chairman in 1973-1974 and as chairman of the intercollegiate tournament in 1976. She has been ranked nationally 5 through 9. In addition, she has been a member of squash touring teams to England and Australia. She is assistant director of athletics and squash coach at Dartmouth College, Hanover, NH.

In the past three or four years there has been a tremendous growth in squash as an intercollegiate sport. The number of coaches of women's teams has jumped proportionately. Most women coaching now were never coached on a team. Several were players and have knowledge of the game, but each has her own ideas as to how to impart this knowledge to her team. It is hoped that this article will help the less experienced squash coach develop her college team.

At the beginning of the season, go over the basic swing emphasizing the importance of the proper squash stroke – both from the point of view of safety and its importance to the proper execution of a shot. The three points to emphasize are: get racket up behind, the emphasis of the stroke is down, and the racket finishes low and in front toward the front wall.

Alley Shot

The people who come out for the team vary in experience and ability so, when mentioning specific shots, assume they know nothing. With each new shot, describe what it is, how to stroke the ball, and when to make the shot. First work on alley and crosscourt shots from the back corners. These are made from a defensive position in the back corners and made in such a way that the player will then be able to move into an offensive position in the "T."

A good alley shot will hug the wall and come back to or just beyond the service line. If it bounces short of the service line, the opponent can easily step across and return it without allowing the other player to get set in the "T." The shot should not be too deep or the opponent will have a chance to get it off the back wall. The players must understand that this is what they want their alley shot to do, not just keep it close to the wall. Not all players are able to keep the ball low on the front wall and also have it bounce deep, so they should be encouraged to hit the ball higher on the front wall. A

low, hard alley shot that bounces halfway back in the court is easier to return than a higher one that bounces just beyond the service line.

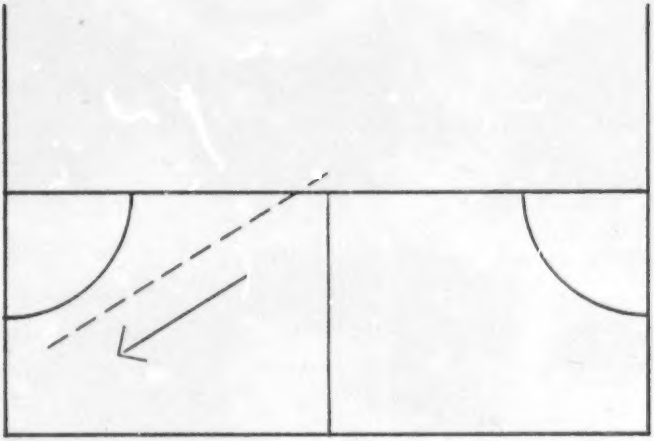

Figure 1. Arrow shows where opponent must move to return the shot.

Crosscourt Shot

The second defensive shot is the crosscourt shot. The player should be coached to aim a few feet above the tin so that the ball will come back to the opposite service box. It must not break on the side wall before the service line because this will bring the ball into the middle of the court where the opponent is waiting. As with an alley shot, the spot at which to aim on the front wall will depend upon the player's strength and positioning.

Once the players have learned to get into the "T" from the serve and from the back of the court, they should work on short shots. The drop, the corner, and the reverse corner shots are the basic ones. They take a great deal of practice and may be practiced on one's own by hitting a straight shot and then making the drop or corner.

Coaching the game is different from teaching the basic shots. Coaching means teaching a player when to use the shots. There are situations produced by the ball and relative position of the opponent which make one shot easier or more logical, or conversely, more difficult or dangerous, than another shot.

It is important to teach the total concept of the game. Basically, a player is trying simultaneously to keep her opponent from getting set and to hit the ball to the spot farthest from her opponent. If the player is behind and her opponent is set in the "T," she should hit the ball deep to either corner to move her opponent back so that she can get set in the "T." If her opponent hits the ball to her in the "T," she should try a short shot, i.e., a corner or drop. Her choice of shots will depend upon her opponent's position and that of the ball. For example, if the opponent was deep in the left corner and hit a poor shot to the middle of the court and stayed toward the back corner, the logical shot would be a corner to the left side wall or a drop toward the right front wall. Coaches must point out these situations and can set up practices which set the ball up to the player in the "T."

After the players learn various shots, they must learn patience. If opponents constantly keep them deep, controlling the "T," they have to constantly move the opponents from the "T" by means of alley or crosscourt shots or use a little variety. The player should not try drop shots and corner shots if she is deep in the corner and her opponent is set in the "T" watching her hit. The player must learn to be patient and wait for the setup, even if it takes 10 or 12 exchanges down one side or another.

Another way in which the coach can help a player is to point out the situation in which certain shots are easier to execute than others and in which cases some should not be tried. For example, the player in the back corner has learned that she can do an alley shot or a crosscourt shot to move her opponent out of the middle. Her decision as to which shot to make should not be arbitrary, but influenced by the position and flight of the ball she is about to hit. If the ball is hugging the wall, it will be difficult to return and she should try an alley shot. If she tries a crosscourt shot in that situation, she will probably be unable to hit a great enough angle and will therefore set up her opponent. If the ball is a foot from either wall, she may decide to do either shot. If the ball has hit the side wall and the back wall, then a diminishing angle shot back into the same corner will cause the opponent to run farther than a crosscourt.

The position of the players also helps to make the choice. If the opponent stands in front of the "T" or to the near side, a good crosscourt will pass her more easily than an alley shot. The player who is hitting the ball must consider her own position. If she is off-balance, she should hit a lob alley shot to enable her to recover and get to the "T." A crosscourt shot is the easy one to do from an off-balanced position, but it is hard to do accurately in that situation. If the ball is hit short, and the player who hit it is

recovering balance, a quick drop to the opposite front corner by the opponent or a good deep alley shot on the opposite side can win the point.

Because of the nature of the game, psychological readiness is as important as physical skill. To win a game of squash, a player must have physical skill coupled with self-control, determination and ability to concentrate despite distractions. The most obvious distraction to overcome is the opponent. In most racket games, a net separates the two, whereas in squash, the players pass, push off, and occasionally, hit each other with the racket or ball, and often will get in each other's way. This close contact, even eye contact, can be upsetting to some. Discussion with the team on this aspect of the game, learning to keep cool at all times, is invaluable in developing confident play.

Making an error can also lead to making more errors. The player must learn to play one point at a time and forget the one that was just played. If she worries about missing one serve return, she may miss three more before she gets back into the game. It is important for the player to realize before going into a match that she is going to make a few errors. When they happen, she should forget them and go on to the next point. She should strive to play with an even temperament whether winning or losing. This will cause her to make fewer errors.

Learning to play in competition comes only from playing in competition. One way to help prepare for the season is to have a small tournament of four players where the two winners and two losers play a second match to determine the winner for the day. This can be done in one practice period. The other way to gain experience is through the ladder tournament where the players vie for positions on the team. In some instances, this can lead to exciting matches, especially between those playing for the #1 spot and for those aiming for the last spot. Through this, some players will realize they like squash but don't like competition, and it is good to know this before the season begins.

Conditioning is an important part of the game. Practice and playing alone are not enough. Long runs, one mile and over, should be encouraged, especially before and during the early season. Sprints and jumping rope are necessary throughout the season. It is important to be fit and fresh for the final or fifth game of a match. Sprinting, running and jumping should be done after practice in order to push the players while they are tired.

Typical practices (based on five 1½ hour sessions a week) might be organized as follows:

Monday 20 minutes practicing receiving serves, watching the return to see that it is accurate. Next 20 minutes playing

out the points, each serving 10 points and then changing. 20 minutes playing with a second partner, 20 minutes with a third partner.

Tuesday – playing a round-robin. Four people of nearly equal ability playing in two adjacent courts; change after 25 minutes. The coach may play in one of the groups to give more individual attention.

Wednesday – practicing corner shots. One sets it up to the other with a weak shot to the middle of the court, or one that comes off the side wall at a wide angle toward the middle. Change sides. Do several to each side. Play a match scoring two points for a corner winner.

Thursday – same as Wednesday.

Friday – two matches against people close to each other on the ladder.

All practices should be followed by some sort of running or jumping rope. After the season's matches start, the week's schedule may change slightly. One day challenge matches may occur, another day an intercollegiate match may take place, and another day may be spent entirely on setups and shot making that may have been a consistent weakness during the previous match.

Coaching during an intercollegiate match is an art. When five or more matches are going on at once, it is often difficult to see them all. If everyone on your team is winning, that makes it easy– just enjoy it. If a few are having trouble, try to concentrate on watching each of these. Two things might become obvious. One, your player may be doing some basic things wrong, such as not moving to the middle after each shot or not getting her racket ready in time. Second, the opposing player may have an obvious weakness of which your player is not taking advantage. When the score is 2-1, the player is allowed to leave the court, and you can tell her these things. Of course, there may be many other things happening. It is important to give her confidence, or, if she is ahead, to keep her calm or confident. This depends upon your knowing each of your players. What you will say to a player is based on your own personality, how well you know your player, and how you relate to her. It is an intangible part of the game and cannot be dealt with on paper.

Coaching squash is challenging and fun. The players differ from season to season and in different colleges so each coach must vary her methods.

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University of Pittsburgh

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United States Squash Racquets Association
Singles Rules

1. Server. At the start of a match the choice to serve or receive shall be decided by the spin of a racquet. The server retains the serve until he loses a point, in which event he loses the serve.

2. Service. A ball is in play from the moment at which it is delivered in service until

(a) the point is decided;

(b) a fault, as hereinafter defined is made; or

(c) a let or let point, as hereinafter defined, occurs.

At the beginning of each game, and each time there is a new server, the ball shall be served from whichever service box the server elects and thereafter alternately until the service is lost or until the end of the game. If the server serves from the wrong box, there shall be no penalty and the service shall count as if served from the correct box, provided, however, that if the receiver does not attempt to return the service, he may demand that it be served from the other box, of if before the receiver attempts to return the service, the referee calls a let, (as hereinafter defined), the service shall be made from the other box.

The server, until the ball has left the racquet from the service, must stand with at least one foot on the floor within, and not touching the line surrounding the service box and serve the ball onto the front wall above the service line and below the 16-inch line before it touches any other part of the court, so that on its rebound (return), it first strikes the floor within, but not touching, the lines of the opposite service court, either before or after touching any other wall or walls within the court. A ball so served is a good service, otherwise it is a fault.

If the first service is a fault, the server shall serve again from the same side. If the server makes two consecutive faults, he loses the point. A service called a fault may not be played, but the receiver may volley any service which has struck the front wall in accordance with this rule.

3. Return of Service and Subsequent Play.

(a) To make a good return of a service or of a subsequent return, the ball must be struck on the volley or before it has touched the floor twice, and reach the front wall on the fly above the telltale, and it may touch any wall or walls within the court before or after reaching the front wall. A return is deemed to be made at the instant the ball touches the racquet of the player making the return.

(b) If the receiver fails to make a good return of a good service, the server wins the point. If the receiver makes a good return of service, the players shall alternate making returns until one player

fails to make a good return. The player failing to make a good return loses the point.

(c) Until the ball has been touched or has hit the floor twice, it may be struck at any number of times.

(d) If at any time the ball hits outside the playing surfaces of the court, which includes the ceiling and/or lights or hits a line marking the playing surfaces of the court (except on the first service, when it is one fault), it is a point against the player so hitting the ball.

4. Score. Each point won by a player shall add one to his score.

5. Game. The player who first scores 15 points wins the game excepting that:

(a) At "13 all" the player who has first reached the score of 13 must elect one of the following before the next serve:
(1) Set to 5 points–making the game 18 points.
(2) Set to 3 points–making the game 16 points.
(3) No set, in which event the game remains 15 points.

(b) At "14 all," provided the score has not been "13 all," the player who has first reached the score of 14 must elect one of the following before the next serve:
(1) Set to 3–making the game 17 points.
(2) No set, in which event the game remains 15 points.

6. Match. A match shall be the best three out of five games.

7. Keep Out of Opponent's Way. Each player must get out of his opponent's way immediately after he has struck the ball and

(a) Must give his opponent a fair view of the ball, provided, however, interference purely with his opponent's vision in following the flight of the ball is not a let;

(b) Must give his opponent a fair opportunity to get to and/or strike at the ball in any position on the court elected by his opponent;

(c) Must allow his opponent to play the ball from any parts of the court elected by his opponent;

(d) Must allow his opponent to play the ball to any part of the front wall or to either side near the front wall.

8. Ball in Play Touching Player. If a ball in play, after hitting the front wall, but before being returned again, shall touch either player, or anything he wears or carries (other than the racquet of the player who makes the return), the player so touched loses the point, except as provided in Rule 9(b).

If a ball in play touches the player who last returned it or anything he wears or carries before it hits the front wall, the player so touched loses the point.

If a ball in play, after being struck by a player on a return, hits the player's opponent or anything his opponent wears or carries before reaching the front wall:

(a) The player who made the return shall lose the point if the return would not have been good.

(b) The player who made the return shall win the point if the ball would have gone directly from the racquet of the player making the return to the front wall without first touching any other wall.

(c) The point shall be replayed as a let (Rule 9) if the return, except for such interference, would have hit the front wall fairly and (1) would have touched some other wall before so hitting the front wall, or (2) has hit some other wall before hitting the player's opponent or anything he wears or carries.

When there is no referee, if the player who made the return does not concede that the return would not have been good, or alternatively, if the player's opponent does not concede that the ball has hit him (or anything he wears or carries) and would have gone directly to the front wall without first touching any other wall, the point shall be replayed as a let (Rule 9).

In all cases covered by the rule, play shall cease even though the ball goes up.

9. Let. A let is the stopping of play and the playing over of a point.

In addition to the lets described in Rules 2 and 8 (c), the following are lets if the player whose turn it is to strike the ball could otherwise have made a good return:

(a) When such player's opponent violates Rule 7;

(b) When owing to the position of such player, his opponent is unable to avoid being touched by the ball;

(c) When such player refrains from striking at the ball because of a reasonable fear of injuring his opponent;

(d) When such player before actually hitting or in the act of striking or striking at the ball is touched by his opponent, his racquet or anything he wears or carries;

(e) When on the first bounce from the floor the ball hits on or above the 6½ foot line on the back wall;

(f) When a ball in play breaks. If a player thinks the ball has broken while play is in progress he must nevertheless complete the point and then immediately request a let, giving the ball to the referee for inspection. The referee shall allow a let only upon such immediate request if the ball proves in fact to be broken.

A player may request a let or a let point. A request by a player for a let shall automatically include a request for a let point. Upon such request, the referee shall allow a let, let point, or no let.

No let shall be allowed on any stroke a player makes unless he requests such let before actually hitting or in the act of striking or striking at the ball.

The referee may not call or allow a let as defined in this Rule 9 unless such let is requested by a player; provided, however, the

referee may call a let at any time (1) when there is interference with play caused by any factor beyond the control of the players, or (2) when he fears that a player is about to suffer severe physical injury.

On the replay of the point the server (1) is entitled to two serves even though a fault was called on the original point, (2) must serve from the correct box even though he served from the wrong box on the original point, and (3) provided he is a new server, may serve from a service box other than the one he selected on the original point.

10. Let Point. A let point is the unnecessary violation of Rule 7 (b), 7 (c) or 7 (d). An unnecessary violation occurs (1) when the player fails to make the necessary effort within the scope of his normal ability to avoid the violation, thereby depriving his opponent of a clear opportunity to attempt a winning shot, or (2) when the player has repeatedly failed to make the necessary effort within the scope of his normal ability to avoid similar violations. The player unnecessarily violating Rule 7 (b), 7 (c) or 7 (d) loses the point.

When there is no referee, if a player does not concede that he has unnecessarily violated Rule 7 (b), 7 (c), or 7 (d), the point shall be replayed as a let.

11. Continuity of Play. Play shall be continuous from the first service of each game until the game is concluded. Between each game, play may be suspended by either player for a period not to exceed two minutes, and between the third and fourth games play may be suspended by either player for a period not to exceed five minutes. Except during the five-minute period at the end of the third game, no player may leave the court without permission of the referee. The referee may suspend play for such period as he may consider necessary. If play is suspended by the referee because of an injury to one of the players, such player must resume play within one hour or default the match. The foregoing provisions shall be strictly construed. Play shall never be suspended to allow a player to recover his strength or his wind. The referee shall be the sole judge of intentional delay, and, after giving due warning, he must disqualify the offender.

In the event the referee suspends play other than for injury to a player and for some cause beyond the control of both players, such as the failure of the electric lighting system, play shall be resumed when the cause of such suspension of play has been eliminated, provided, however, if such cause of delay cannot be rectified within one hour, the match shall be postponed to such time as the tournament committee determines and the match shall be resumed from the point and game score existing at the time the match was stopped unless the referee and both players unanimously agree to play the entire match or any part of it over.

12. Attire and Equipment. (a) Player's attire must be white. Any controversy over attire shall be decided by the referee, whose decision shall be final.

(b) The standard singles ball of the United States Squash Racquets Association shall be of black rubber 1.700 to 1.750 inches in diameter and shall weigh 1.12 to 1.17 ounces. It shall be pneumatic. At a ball temperature of 70° to 74° F., it shall have a rebound on a steel plate between 24 to 26 inches from a drop of 100 inches. After 10 minutes or more of play or at a ball temperature of 83° to 84° F., it shall have a rebound on a steel plate of 27 to 30 inches from a drop of 100 inches. For a supplementary test in a court, after 10 minutes or more of play the ball shall have a rebound from the 6½ feet rear red line of not more than 25 inches and not less than 23 inches.

The difference in rebound between a ball before play and after play of 10 minutes or more, whatever the temperature of the court or the ball, shall not exceed 20 percent of the before play rebound.

For purposes of this rule a minimum of 300 blows by the authorized testing device of the Association shall be deemed to be the equivalent of the 10 minutes or more of play referred to above, since this procedure yields a ball temperature of 83° to 84° F.

Manufacturers may use the testing device of the Association which is available through the chairman of the Committee on Courts, Bats and Balls or procure their own.

(c) The racquet or bat shall be made of wood and have a circular shaped head with a diameter not exceeding 9 inches, and shall not exceed 27 inches overall length, with a weight of approximately 10 ounces. It shall be strung with gut or a substitute material, provided it is not metal. Materials or racquet designs which do not conform with this section, or the generally recognized manufacturer's standards, should be submitted to the Executive Committee for approval prior to manufacture or usage.

13. Condition of Ball. (a) No ball, before or during a match may be artificially treated—that is, heated or chilled.

(b) At any time, when not in actual play, another ball may be substituted by the mutual consent of the contestants or by decision of the referee.

14. Condition of Court. No equipment of any sort shall be permitted to remain in the court during a match other than the ball used in play, the racquets used by the players, and the clothes worn by them. All other equipment, such as extra balls, extra racquets, sweaters when not being worn, towels, bathrobes, etc., must be left outside the court. A player who requires a towel or cloth to wipe his eyeglasses should keep same in his pocket or securely fastened to his belt or waist.

15. Referee. (a) A referee shall control the game. This control shall be exercised from the time the players enter the court. The referee may limit the time of the warm-up period to five minutes, or shall terminate a longer warm-up period so that the match commences at the scheduled time. The referee's decision on all questions of play shall be final except as provided in Rule 15(b).

(b) Two judges may be appointed to act on any appeal by a player to a decision of the referee. When such judges are acting in a match, a player may appeal any decision of the referee to the judges, except as provided in paragraph (d) hereof. If one judge agrees with the referee, the referee's decision stands; if both judges disagree with the referee, the judges' decision is final. The judges shall make no rulings unless an appeal has been made. The decision of the judges shall be announced promptly by the referee.

(c) A player shall not state his reasons for his request under Rule 9 for a let or let point or for his appeal from any decision of the referee or judges, provided, however, that the referee may request the player to state his reasons.

(d) After giving due warning, the referee in his discretion may disqualify a player for speech or conduct unbecoming to the game of squash racquets. This decision of the referee may not be appealed.

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